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Editor's Note

This volume of the National Security Series contains the texts of the *USI National Security Lecture 2002*, the proceedings of the *National Security Seminar 2002,* and the *National Security Paper 2002.*

Shri I. K. Gujral, the former Prime Minister of India, delivered the *National Security Lecture* on **"India's Look East Policy : A Review and Way Ahead"**. He referred to the pivotal geographic-cum-historic position occupied by India amidst the nations and cultures of Asia. He recalled that "Look East" is not a new concept. It had been articulated in thought and practice by Nehru, even before Independence. He highlighted the importance of the South Asian Association for Regional Cooperation (SAARC) as the foundation for progress and economic development for the region. However, there is much to learn from the Association for South-East Asian Nations(ASEAN). ASEAN's cohesion was highlighted against SAARC's disarray. The ASEAN nations do not allow differences in bilateral relations to adversely influence regional cooperation. For building a new future, the ASEAN countries are willing to forget past differences. These good points should be emulated by the SAARC countries. The manner in which India conducts its SAARC diplomacy would also influence the manner in which countries of the ASEAN region would view India. India does not have, as China does, substantial resources to invest in projecting its presence abroad. The attraction of India lies in the fact that it is a model of democratic society with a creative cultural and intellectual tradition. These features combined with India's historical record of benign and peaceful engagement with the outside world can make India attractive to the countries of the ASEAN region. It is "goodwill" and "high reputation" that India must maintain in all dealings, these being its best credentials. China's strong economic presence and growing influence in countries like Myanmar, Vietnam, Laos and Cambodia need to be taken note of, and suitably countered.

The topic of the *National Security Seminar* was **"Vulnerabilities of Our Economy in the Backdrop of Globalisation : An Analysis of India's Long Term Economic Security"**. The economic challenges to the nation are both internal and external. The internal factors pertain to the differential in rate of growth between states, continued poverty, low domestic capital formation, political electoral compulsions, bureaucratic barriers, and lack of good governance. There is an imperative need to improve infrastructure. Internationally, we should derive the benefits of globalisation, understand and interpret the rules of the World Trade Organisation, and attract foreign investments for development. We need to modify and improve our performance, taking advantage of our strengths in the information technology and allied sectors.

The *National Security Paper* "**Safeguarding of India's Energy Security**" by Shri Chudamani Ratnam focusses on the worrisome low availability of oil and gas in India. The need for energy for economic development is one of the pressing national security concerns in an era of increasing expectations. There is a need to work on an international treaty so that all countries get a fair share of available energy. In addition, bilateral arrangements for procuring oil and gas should be strengthened. At the regional level, hydropower energy should be generated by harnessing the Himalayan rivers and optimising use.

NATIONAL SECURITY LECTURE (L-22)

INDIA'S LOOK EAST POLICY: A REVIEW AND WAY AHEAD

BY

SHRI I.K. GUJRAL

India's Look East Policy: A Review and Way Ahead

Shri I.K. Gujral

It is not for the first time that I am visiting this august institution to address such a distinguished group of men who at some stage in their life wore with distinction the military uniform to defend the cause and institutions of the Republic. It is also a matter of great satisfaction that many amongst you have made intellectual contributions in shaping the security policies of the nation. The USI, with its long history, is now an important think-tank of the country. You have asked me to share with you how I view what is called the "Look East" policy in the context of the contemporary challenges.

"Looking East" became the metaphor of Indian foreign policy after then Prime Minister, Shri P.V. Narasimha Rao, articulated this concept during the course of a policy speech delivered in Singapore in 1992. The term has caught on since then and encapsulates today the broad process of India's reengagement with its Asian neighbourhood that had been ignored during the colonial era.

As you know, "Look East" was not, however, a new concept for it had been articulated in thought and practice by that great visionary of India's foreign policy, Jawaharlal Nehru. Indeed, Nehru had convened the first path-breaking "Asian Relations Conference" in New Delhi in 1946, before India had even gained her Independence. This was followed by another major Asian conference, again in New Delhi, to discuss the question of Indonesia and its liberation from Dutch colonial rule.

For Panditji, India and Asia were so intertwined that he sometimes used the two terms interchangeably. India and Asia were both repositories of ancient civilisational values with a rich and glorious history, and both were rediscovering their freedom from colonial rule at the same time. The renaissance of both was interlinked. No doubt, Pandit Nehru's vision was tinged with a certain degree of idealism but he was realist enough to see how India was strategically located at the centre of the Asian system. In a speech before the Indian Parliament in 1949, Panditji observed, and I quote, "One of the major questions of the day is the readjustment of the relations of Asia and the West. When we talk of Asia, remember that India, not because of any ambition of hers, but because of the force of circumstances, because of geography, because of history, and because of so many other things, inevitably has to play a very important part in Asia. And not only that, India becomes a kind of meeting ground of various trends and forces and a meeting ground between what might roughly be called the East and West".

He further addressed the members of Parliament, and said, "Look at the map. If you have to consider any question affecting the Middle East, India comes into the picture inevitably, if you have to consider any question concerning South-East Asia, you cannot do so without India. So also about the Far East. So while the Middle East may not be directly connected with South-East Asia, both are connected with India. So, even if you think in terms of regional organisations in Asia, you may have to keep in touch with the other regions. And whatever regions you may have in mind, India's important part cannot be ignored. So India plays a very important role in Asia."

Indeed, the vast continent of Asia has always been part of India's historical consciousness in which India has played a central role in the development of Asian art, culture, religion and philosophy. Indeed, Asia is more than half the world. It is the largest and most populous continent, accounting for nearly 60 per cent of the global population. Eight of the ten most populous countries are in Asia. Several of the great ancient civilisations originated in the continent. Almost all the world's religions—Hinduism, Islam, Buddhism, Christianity, Judaism, Sikhism, Taoism, etc—originated and continue to thrive in Asia.

The Cold War and its shadow over Asia militated against the full integration of Asia in India's strategic vision until the early 1990s. We were, thus, late to the Asian renaissance and the dramatic transformation

that Asia has attained over past decades. Today, analysts agree that the 21st century will witness the rapid progress of Asia and its development as the economic powerhouse of the entire world. It has been said in this context that Asia is poised to become the new strategic centre of gravity in international politics. With this historically momentous shift, for the first time since the modern era began with the signing of the Treaty of Westphalia in 1648, the single largest concentration of international economic power will be found not in Europe—not in the Americas—but in Asia. This will mark the return of Asia to centre-stage in the international system after almost 500 years on the margins.

India's strategic situation in Asia was exploited fully by the British, most notably during World War II. The Allied powers used India as their main logistical base and operational headquarters, as well as their source for military supplies and manpower during this war. Their India bastion enabled the Allies to secure the vital oil and energy supplies of the Gulf states, Iraq and Iran, while on the eastern sector it enabled them to develop a challenge to the Japanese Army on the boundaries of India. The battle of Kohima where the Indian Army defeated the Japanese, marked the latter's first serious defeat in the war. Indeed, some historians have said that the Kohima battle was the first time in 2,600 years that the Japanese Army had been so decisively defeated in battle.

I recall in this connection an episode while serving as India's Ambassador to the Soviet Union in the late 1970s, when I was asked by the Government of India to enquire about the possibilities of India securing two nuclear submarines from the Soviet Union. I met Admiral Gorshkov, who as you know, was an outstanding naval strategist of the time. My personal relations with him were somewhat informal. Rather than posing the question directly, I asked him whether in his opinion India should have nuclear submarines. Gorshkov responded that this depended on whether India wished to have a purely defensive or operational naval capability. I told him that not being a military expert, I could not comment on this, so I sought his opinion as to what India's naval posture should be. His response was interesting. He told me that the Chinese Navy by then had acquired 10 submarines and had the capability to add two to three every year. He believed that such a powerful armada was not required for intervention in the Taiwan Straits nor did the Chinese have any strategic design to move towards New Zealand or Australia. Of course, they would like to disrupt the Soviet Union's naval traffic to and from its Far East part. Gorshkov believed that an important purpose of building such an impressive armada was to probe the Andaman Sea and beyond. Gorshkov wanted me to appreciate that India's security parameters stretched from the Straits of Malacca in the south-east, to the Persian Gulf and down to the Cape of Good Hope in the south-west. India, he felt, should have the capability of defending this vastly spread perimeter that would make acquisition of nuclear submarines a valid requirement.

Asia is the wide canvas within which India's interests must be framed. And to defend our interests over this vast area would require a broad-based response, integrating our military, naval and air capabilities while combining power projection with the most effective use of our diplomatic resources. The South Asian Association for Regional Cooperation (SAARC) region is evidently the first perimeter of India's defences. It would be futile to project our interests further afield if we are unable to do so in our immediate neighbourhood where our concerns are more direct, proximate and tangible. Furthermore, the manner in which we conduct our SAARC diplomacy would also influence the manner in which more removed nations view us. India does not have, as China does, substantial resources to invest in projecting its presence abroad. The attraction of India lies in the fact that it is a model democratic society with a creative cultural and intellectual tradition. These features combined with our historical record of benign and peaceful engagement with the outside world make us attractive to the countries of the Association of South-East Asian Nations (ASEAN) region. It is this goodwill and high reputation that we must maintain in all our dealings, whether with SAARC nations or any others for these are our best credentials.

Finally, whether we like it or not, the fact is that the SAARC region is an integrated entity and cannot be compartmentalised and partitioned along political fault lines. Economic turmoil or political instability in any SAARC country will inevitably have spillover effects in our territory since India is the only nation that borders all other SAARC members. The influx of refugees from Bangladesh and the overflow of terrorist activity from Sri Lanka or the terrorist activity in the bordering areas of Nepal should provide sufficient evidence of this reality.

India has, therefore, very vital interests in preserving the SAARC process. There is no doubt that SAARC has, thus far, fallen short of our expectations. Only 3.5 per cent of total SAARC trade is conducted between SAARC members whereas this figure stands at 70 per cent in other regions such as the European Union. No significant cross-border infrastructure project or investment has taken place in spite of the huge potential for the same.

It is true there is no single reason for the failure of SAARC and all nations to some degree must be held accountable. Nevertheless, we must realise that India is the central figure in SAARC, both geographically and in terms of our overall predominance and population. Incidentally, we have to shoulder a heavier burden of responsibility.

In the development of the SAARC framework, there is much we can learn from the ASEAN countries. I recall a 1995 Track-II Seminar in Rawalpindi when Mr Ghazali Shafi, a leading public figure of Malaysia, spoke of ASEAN's cohesion compared to SAARC's disarray. He gave three principal reasons for this. Firstly, he said that ASEAN countries, even while differing in private, agreed in public. The SAARC tendency, unfortunately, was the opposite. Secondly, he said that ASEAN nations do not let the ups and downs of bilateral relations amongst the member countries influence their regional cooperation. Thirdly, ASEAN nations are willing to overcome and forget past differences for building a new future. Thus, despite the fact that Indo-China was the scene of the longest Cold War confrontation, Vietnam, Laos and Cambodia were readily admitted into the ASEAN family once the shadow of the Cold War had passed.

The ASEAN countries have a flexible, pragmatic and forward-looking tendency while we in SAARC seem to be held hostage by various rigidities and inflexibilities. For us in India, this is manifest in an undue obsession with Pakistan. There is no doubt that the military rulers of Pakistan have been guilty of deceit, violence and worse in their dealings with us. This is true but we should also recognise that Pakistani society is not monolithic, and while the Armed Forces of Pakistan and certain other militant sections may harbour a deep-rooted animosity towards us, there is also a growing tendency amongst liberal circles and civil society in Pakistan, urging it to shed its primitive militant ideologies and build a more democratic society based on some degree of reconciliation with India. To quote an example, in a recent article in the *Daily Times* of Lahore, Naeem Sadiq observes, "It is ironic that Pakistan spends all its energies trying to liberate others, while it has failed to liberate its own self from the repeated invasions of its own Army. An Army that today owns Pakistan, instead of Pakistan owning an Army." He was bold enough to suggest, "Pakistan needs to undertake a fair amount of reengineering, if it wishes to change the course of history for itself. The initiative must come from the Army. The military must voluntarily step aside. The Majors and Colonels of the intelligence agencies must stop determining the 'supreme national interests of Pakistan'." The author proceeds to courageously advise, "Our desire to rule Kashmir must be completely set aside. The best we can do is to leave Kashmir to the Kashmiris. Countries that cannot govern their existing boundaries should have little reason to look for more territory."

This is one example, and there are several others, of the new tendency amongst liberal and intellectual circles, to criticise the growing anarchy in the Pakistani system. In the Western media, of course, Pakistan's image is far worse. It is in this context that a worried General Musharraf, only on 19 January 2003 told the businessmen and industrialists of his country that he was apprehending Pakistan becoming a target of war after the Iraq crisis and he wanted that an all out effort should be made to avoid such a situation. Sooner or later, Pakistan will have to undergo basic changes in its socio-political ethos. The main point I am making here is that in terms of state ideology and culture, Pakistan has failed. India, on the other hand, has been a success. In these circumstances, I fail to see why we should impose strict visa restrictions on Pakistani visitors. Journalists, intellectuals and other thinking people should, I feel, be encouraged to visit India to see for themselves the progress in our economy and vitality of our socio-cultural milieu. Such visits would inevitably reinforce modernist forces in Pakistan. During my nearly five years stay in Moscow, I saw for myself that the Soviet system was undermined not so much by the US' missiles or weapons but more by its democratic culture which was relentlessly projected through a variety of media channels into the closed heartland of the Soviet Union.

Likewise, there was no need for our Foreign Minister to publicly hurl accusations against the Bangladesh government for sheltering extremist elements at a time when the former Prime Minister Sheikh Hasina was in India. The facts narrated by the Foreign Minister may be true, but hysterical outbursts do not manifest our strength. An alienated Bangladesh may choose to ape Myanmar and move in that direction. Viewed in this context the SAARC provides a bulwark to our security and contributes to our economic strength. Our indifference to regional cooperation can be perilous. I am conscious that terrorism is haunting us and most of our neighbouring countries. It is desperately trying to establish its foothold in Bangladesh, Bhutan and in our eastern states. Quiet diplomacy and a helping hand is the need of the hour.

While we are preoccupied in our region, China is moving rapidly to build up its presence in key countries of Asia. The Chinese have committed themselves to a free trade agreement with ASEAN by the year 2010 and

many ASEAN countries are looking to the Chinese economy for new impulses to growth. China has also pledged assistance for the proposed Singapore-Kunming rail link project, a 5,500-km-long rail track costing US $ 2.5 billion, which will run through the main continental ASEAN states to China. It is also building an additional rail link with oil rich Kazakhastan and providing a naval outlet to this landlocked country.

As I have said, China's cultivation of strategically situated Myanmar has been especially vigorous. Myanmar's military ruler, Senior General Than Shwa visited China earlier this month where he signed several pacts to enhance economic cooperation, including a US$ 200 million preferential loan package from China to Myanmar. Apart from sustained supply of arms, China is also building its highways, telephone exchanges, and fertiliser plants. It has acquired facilities to use the Irrawady waterway that takes it directly to the Bay of Bengal. Last year witnessed the completion of the first phase Myanmar's Thilawa Shipyard Project which is China's show-piece project in Myanmar. Apart from Myanmar, China's economic presence is also felt in other poorer ASEAN states like Vietnam, Laos and Cambodia. It is this growing influence in our strategic hinterland that we must be cognisant of and prepared to counter.

The deadly shadow of war is hanging over the world generally and West Asia more specifically. It is no secret that the Anglo-American agenda is intent on securing a regime change in Iraq, by whatever means possible. This would be an unacceptable intervention in the sovereignty of the Iraqi people who alone have the right to decide the form and system of their government. It seems that the ultimate goal of the mighty powers is to gain control over the oil wealth of that country, and dictate the flow of oil in world markets. This has for long been the underlying objective of American diplomacy in oil rich West Asia. I recall my talks with the US Secretary of State during the Iraq-Kuwait crisis of 1990–91. He minced no words when he told me, "Mr Minister, oil is our civilisation, and we will never permit any demon to sit over it." We may recall the Iranian Prime Minister Mossadegh's fate, who paid a heavy price for no other crime than nationalisation of Iran's own oil. What followed was the surge of ultra-nationalistic-cum-religious regimes. I apprehend the emergence of a similar *intifada* in the post-Saddam era, should this come to pass.

President Mohammad Khatami of Iran will be a welcome guest on our Republic Day. This visit will bring us closer to an important Asian neighbour. During my tenures, we had worked out a shared approach towards the

Taliban regime in Afghanistan and for rendering support to the Northern Alliance. We were then witnessing the rising surge of terrorism that aimed at destabilising both the Iranian and Indian civil societies.

As the historians amongst you would know, in 1990, I had put my signature on a trilateral treaty with Iran and Turkmenistan to provide an alternative sea-cum-rail route to Central Asia by-passing the strife ridden Afghanistan. It would be of interest to note that Russia has recently signed a Letter of Intent with Tehran and Pakistan to build an overland gas pipeline, with India as its destination. The prevailing situation in Afghanistan and Pakistan may not be helpful but I am hopeful that soon we will see its end.

May I conclude on a somewhat personal note? As Foreign Minister and later Prime Minister of India, it was my privilege to steer the course of Indian foreign policy during some critical years. The basic parameters of Indian foreign policy are set in consensus and tradition, and the job of the Foreign Minister is really to understand the fundamentals and attune them to the changing currents of time.

The "Gujral Doctrine" that it came to be called, was a simple, good neighbour policy. The novelty lay in one small but crucial clause which said that India would go more than half the way in meeting the concerns of its neighbours. We would not stand on mechanical notions of reciprocity to implement initiatives for the common benefit of our partners in the region. This policy was instrumental in building mutual trust, confidence and cooperation amongst our neighbours and creating an environment conducive to the progress of the subcontinent as a whole. The philosophy behind this doctrine was that a larger nation has the greater stake in the welfare of its region, and has more to lose should things go wrong.

As I have said, Asia today is rife with anxieties, deprivations and insecurities. Some new threats to peace and well-being seem to emerge every day. In today's uncertain world, the approach I suggested would seem to have a larger relevance. For unless the world's larger and more affluent countries see their interest in the welfare of their smaller partners, peace and security in Asia will continue to be in jeopardy. Let me hope and pray that the Sun of Hope will rise soon.

NATIONAL SECURITY SEMINAR (S-29)

VULNERABILITIES OF OUR ECONOMY IN THE BACKDROP OF GLOBALISATION: AN ANALYSIS OF INDIA'S LONG-TERM ECONOMIC SECURITY

APPROACH PAPER

USI National Security Seminar–2002 Vulnerabilities of our Economy in the Backdrop of Globalisation: An Analysis of India's Long-Term Economic Security

Introduction

Globalisation refers to a process of increasing economic openness and integration into the world economy. In 1991, India made a decisive shift in its economic policy to become a more open and liberal economy. The balance of payments crisis was the immediate motivating factor, but large-scale economic reforms that were undertaken cannot be explained just by the balance of payments crisis. These have to be explained in terms of the long felt need to boost the economy.

There are three basic parameters to determine a country's openness to the world economy. These are as under:

(a) The proportion of a country's Gross Domestic Product (GDP) in relation to the international trade of goods and services.

(b) The level of operations which indicates the degree of protection given to local production against imports.

(c) The amount of Foreign Direct Investment (FDI).

Over the period 1989 to1998, India's foreign trade (sum of exports and imports of goods and services as a percentage of GDP) expanded from 16.55 per cent to 24.78 per cent. This represents a growth of about 50 per cent over a period of 10 years. Though in terms of India's own economic past, this represents a significant change, the average annual rate of growth of about 5 per cent can be termed only as a modest growth. *However, India remains on the periphery of the globalisation process, as it accounts for a mere 0.7 per cent of world trade.*

The import duties as a percentage of imports have fallen dramatically from 46 per cent in 1991 to 24 per cent in 1998. As far as tariff levels are concerned, liberalisation has not made much difference to the relative standing of India vis-a-vis other countries. India continues to remain at the top of the list in terms of tariff levels.

FDI between 1992 and 1998 has been, on the average, less than US $ 3 billion per year. *After reaching a peak of US $ 3.56 billion in 1997–1998, it receded gradually to US $ 2.16 billion in 1999–2000. It rose marginally to US $ 2.34 billion in 2000–2001. FDI inflows during 2001–2002 have been better. FDI is a means to supplement domestic investment for achieving a higher level of economic growth and development.* The FDI that India has been able to attract has largely been for the purpose of accessing the Indian market or for the acquisition of local firms rather than using India as a platform for exports.

India lags far behind, even in comparison to its South Asian neighbours, in international integration in trade. In 1998, foreign trade in goods and services as a percentage of GDP for Pakistan was 36.03 per cent, for Bangladesh 34.67 per cent, for China 31.08 per cent, for Sri Lanka 85.96 per cent, as compared to 24.78 per cent for India. Among low income and middle income countries, India is more or less at the bottom of the list. Keeping the above parameters in view, it appears that the sustainability of the Indian economy in the long run would depend more on domestic factors than on external ones.

Growth in GDP

The principal yardstick of economic performance is the GDP growth rate, which after averaging 3.6 per cent per year between 1950–51 and 1980–81, averaged 5.6 per cent from 1981–82 to 2000–01. While the growth during the 1980s was marked by unsustainable fiscal deficits and strains on balance of payments, the position has been more manageable in the 1990s, after the reforms. India's growth performance and even per capita GDP growth rate during last two decades has been good.

However, disquieting trends are emerging. During the last four years, GDP growth rate has dropped to 5.4 per cent and in the year 2001–02, it is likely to be 5.1 per cent. It is the quality of growth rate which is worrisome. The agricultural growth rate has dropped to an average of 1.2 per cent per annum and industrial growth to 4.8 per cent. Only growth in the services sector (which now accounts for 50 per cent of the aggregate GDP) which averaged 8.1 per cent, keeps the GDP growth rate from falling more steeply. If we ignore the growth in the services sector, then we are back to the old "Hindu" rate of growth. There is a point of view that for a country with a low level of per capita output of material goods, and agriculture remaining the main source of livelihood, a rapid rise in the share of services in the GDP cannot solve many of its problems. Further, the growth in the services sector cannot be sustained in the event of a low growth rate in agriculture and industry. Activities in the services sector such as processing and marketing of commodity output, banking and insurance are directly related to commodity production. With the deceleration of growth, particularly in the industrial sector, a growth rate of only 5.4 per cent has been forecast for the services sector in the year 2001–02. This inter-sectoral linkage makes it necessary to have a closer look at the growth in other sectors.

Industrial Growth

Abolition of Licence System. Under the reforms, industrial licensing has been abolished; large business houses are no longer required to take permission for investment and expansion; equity in public enterprises is being divested; quantitative restrictions on imports have been virtually abolished; import duties have been significantly reduced; and access to foreign capital has been made freer. The idea behind these reforms was to bring in a more competitive environment, improve efficiency and, hence, growth.

Impact on Production. After the high growth of industrial production which was reached in the mid-1990s, there has been a steady decline in industrial production. The compound annual rate of growth of gross value added by the registered manufacturing sector was 5.91 per cent between 1990–91 and 1998–99. But during 2000–01, the growth was 5.3 per cent, and as per the forecast for 2001–02, it is not likely to exceed 4.5 per cent. It is to be noted that the growth achieved in industrial production in the post-reform period has not been able to surpass the growth achieved during the first fifteen years of Indian planning which had the strategy of development of basic and heavy industries.

Qualitative Change. There has been a qualitative change in the growth of industrial production. The growth in the initial planning stage was led by basic and capital goods; the growth in the 1990s has been led by consumer goods, particularly consumer durable goods. If capital and intermediate goods are to be regularly imported to sustain the growth in consumer goods, then there has to be rapid growth in exports. While there was a sharp jump in the rate of growth of exports from 1993–94 to 1995–96, since then there has been a decline in the growth of exports. If this trend continues, in the long run it would make India vulnerable.

Agriculture and GDP

In spite of year to year fluctuations agricultural output maintained an average rate of growth of 3.1 per cent during the 1980s as well as the 1990s. The share of agriculture in GDP is declining steadily and it now contributes about 30 per cent to the GDP. According to the Economic Survey 2001–02, after a stagnation period in 1999–2000 and a negative growth in 2000–2001, the agriculture sector is expected to grow at nearly 6 per cent during the current year, pushing the GDP growth rate to 5.4 per cent. But agriculture's share in the workforce is not declining despite its declining trend in the GDP. The employment growth rate decelerated from 242.46 million in 1993–94 to 237.56 million in 1999–2000. There are no infrastructure projects to absorb manual labourers. This indicates that more and more people are depending on agricultural activities and also indicates a low absorption capacity of the secondary and tertiary sectors. Agriculture still employs two-thirds of the country's workforce. This, coupled with a declining share of agriculture in the GDP, indicates lower labour productivity which is reflected in the rise in the percentage of the rural population below the poverty line. The lack of agricultural growth affects industrial growth. An increase in agricultural growth leads to increase in rural demand for industrial commodities and thereby stimulates growth of industry. Agriculture also supplies basic raw material for agro-based industries. Based on annual GDP data, econometric analysis shows a very close relationship between industrial growth rate and the one year lagged agricultural growth rate. One year lagged incorporates the demand and supply lags between agriculture and industry. The stagnant agriculture in 1999–2000 and 2000–2001 is a major factor behind the recent slowdown in industry. Further, the quality of infrastructure is not good and adversely affects functional efficiency.

To improve growth and productivity in the agriculture sector, there has to be more investment in irrigation, land development, soil conservation, agriculture research and development, development of agricultural marketing, expansion and maintenance of rural and district roads. These basic investments in rural infrastructure can only be undertaken by the public sector. But the level of expenditure on these items has declined in real terms because of severe fiscal problems of the states. Investments in health and education in rural areas have also suffered because of fiscal problems.

External Debt

India has an external debt of more than $ 100 billion. The amortisation of external debt is almost equal to external commercial borrowings. With a declining trend in the growth of exports and capital flows, the exchange rate depreciation and the downgrading of India's sovereign ratings for the future borrowings from abroad, the servicing of debts could be a big burden for the economy in the coming years. A significant portion of external debt consists of commercial borrowings and NRI (Non-Resident Indian) deposits which may become increasingly vulnerable and withdrawn at short notice in the coming years. This would put pressure on balance of payments. External debt is, therefore, a major vulnerable area.

Process of Ageing of Population

According to the US Bureau of Census International Data Base, the percentage of population in India of the age group 65 years and above (projected) in 2025, would be 7.8 per cent as compared to 4.6 per cent in 2000. This population ageing would affect the availability of the workforce for sustaining productivity.

Infrastructure

The basic constraint of industrial production is the lack of sufficient growth of infrastructure. The growth rate of infrastructure industries, to include roads, railways, port facilities, energy availability, telecommunication networks, and so on, has declined sharply from the mid-1990s onwards.

Electric Power

Power shortages adversely affect economic growth. Power generation at 499.6 billion kwh in 2000–2001 recorded a growth of 3.9 per cent. Owing to heavy transmission and distribution (T&D) losses suffered by State Electricity Boards (SEBs), low user charges, and low operational and technical efficiencies, the power system in the country is experiencing great difficulty. The State Electricity Boards have continued to suffer from high T&D losses which were at 24.8 per cent in 1997–1998, and increased to 25.6 per cent in 1998–1999. The hidden gross subsidy for the agriculture and domestic sectors has increased from Rs. 7,449 crore in 1991–1992 to Rs 34,428 crore in 2000–2001 and is projected to go up further to Rs 38,836 crore in 2002–2003. In order to ensure proper utilisation of resources, reforms are required in the power sector.

Fiscal Problems

The following trends in the fiscal situation, if not corrected in time, would have serious repercussions for the country's economic health:

(a) In the post-reform period, there has been a decline in the tax-GDP ratio.

(b) The improvement in the Centre's fiscal situation up to 1996–97 was entirely due to reduction in the expenditure to GDP ratio from 17.3 per cent in 1990–91 to 13.9 per cent of GDP in 1996–97. Most of the reduction was in capital expenditure.

(c) The deterioration in the Centre's fiscal position after 1996–97 is wholly attributable to the rise in expenditure to GDP ratio to 15.4 per cent by 1999–2000.

(d) This increase in expenditure to GDP ratio is due to the rise in revenue expenditure, attributable to the rise in the pay and pension bill.

(e) There has been a sharp deterioration in the fiscal situation in the states in 1998–1999 and 1999–2000, again due to pay revisions. It is unfortunate that the states are carrying on their day to day business on overdrafts. The outstanding debt of states has now moved from Rs 2,43,000 crore in March 1997 to almost Rs 5,00,000 crore in March 2001. The state debt to GDP ratio was below 18 per cent in 1996–97 but shot up to 23 per cent in 2000–2001. *The interest liability of all states put together in the last ten years has increased from less than* Rs.9,000 crore to a whopping Rs. 54,000 crore.

By international comparison, India's fiscal deficit is definitely high. Deterioration in the fiscal position gets reflected in public savings performance. From 1995–96 to 1999–2000, as the consolidated revenue deficit increased by 3 per cent of the GDP, public savings fell by the same percentage of GDP. This sharp decline in public savings largely explained the drop in gross of domestic saving from 25.1 per cent in 1995–1996 to 21.7 per cent in 1998–1999. The gross investment ratio reflects the trend in the savings ratio which fell from 26.9 per cent in 1995–1996 to 22.7 per cent in 1998–1999. This is the effect of 3 per cent increase in consolidated revenue deficit during this period. "It would be hard to find more telling presumptive evidence of the adverse impact of fiscal deficit on savings and investments"(Shankar Acharya, *Economic and Political Weekly,* 20 April 2002).

In December 2000, the fiscal responsibility and budget management (FRBM) bill was introduced in the Parliament. If implemented, it would have profound implications for the conduct of fiscal policy. It aims at reduction of the Centre's revenue deficit to nil by March 2006. This is still languishing in the Parliament. This brings in the question of governance, which is a major area of vulnerability.

Governance

Economic reforms have been implemented in India without making any attempt to change the system of governance. There are great deficiencies in the working of the three branches of the state, namely, legislative, judicial and executive. Bills have been pending in the Parliament for more than two years. Some of these bills are very important for good governance like the fiscal responsibility and management bill and the competition bill which has relevance for economic reforms. Bills on company law, income tax and money laundering are also pending. At the judicial level, the biggest failure is the huge backlog of cases. The failings in the executive branch are much more than in the other two branches. It is a common perception that the bureaucracy in India is in an advanced state of decay.

The latest Human Development Report (HDR) of the United Nations Development Programme (UNDP) has designed 11 sets of indicators of governance to measure quality of governance. Of these, the important factors are: political stability and lack of violence; law and order; rule of law; corruption perception index and graft. In India we have poor governance when measured against the above factors. Unless governance improves, economic reforms by themselves will not make the economy prosperous and bring about justice and equity.

Seminar Scheme

To examine the aspect of vulnerabilities of our economy in the context of globalisation and measures that need to be adopted to ensure long-term economic security, it is proposed to conduct a two-day seminar on 20 and 21 November 2002, with three sessions, two on the first day and one on the second, as under:

(a) Session I—**Economic Challenges Affecting India's National Security.**

(b) Session II—**Characteristics of the Indian Economy and its Vulnerabilities in the Context of Globalisation.**

(c) Session III—**Measures to Ensure India's Economic Security in the Globalised Environment.**

Welcome Address

Lieutenant General Satish Nambiar, PVSM, AVSM, VrC(Retd.)
Director, USI

At its meeting in February 2002, the Council took a decision that in view of the fact that security now encompasses much more than territorial integrity and military capability to protect a nation, and the fact that economic capability will be a major determinant of the extent to which India would play a role, both regionally and globally in the years to come, it was decided to have a seminar on "Vulnerabilities of our Economy in the Backdrop of Globalisation: An Analysis of India's Long-Term Economic Security". We propose to cover the subject of this seminar in three sessions over a day and a half as under:

(a) **First Session:** Economic Challenges Affecting India's National Security.

(b) **Second Session:** Characteristics of the Indian Economy and its Vulnerabilities in the Context of Globalisation.

(c) **Third Session:** Measures to Ensure India's Economic Security in the Globalised Environment.

We have managed to put together some very eminent participants with expertise in this field, who have agreed to spare their time and share their views with us. Not all the views will be, I think, universally acceptable, but it would be good to hear a number of them as they are among those who have been writing and speaking very frequently on the subject. We, therefore, can look forward to some very interesting discussions over this day and a half.

To set the scene for discussions to follow, we have this morning the inaugural address by the President of the Council of the United Service Institution of India, Lieutenant General Pankaj Joshi, who is the Chief of Integrated Defence Staff. On your behalf, I would like to thank him for taking time off from his busy schedule to be with us this morning. He is one of the few senior officers who do find the time to indulge in intellectual activities that we organise from time to time. Not many of the others do that, I regret to say, but I hope they will follow his example.

With that, ladies and gentlemen, I will request General Joshi to deliver the inaugural address of the seminar.

Inaugural Address

Lieutenant General P.S. Joshi, PVSM, AVSM, VSM, Chief of Integrated Defence Staff to the Chairman COSC and President, USI Council

Introduction

It is a privilege for me to address you all on this important occasion of the National Security Seminar on the subject of "Vulnerabilities of our Economy in the Backdrop of Globalisation: An Analysis of India's Long-Term Economic Security". National security encompasses a complex and wide range of issues. In the current global scenario, economic strength is vital for national security. In the last couple of decades, the world has been governed increasingly by economic interests. In the corporate world, maximising profits is, by and large, the main objective. However, men in uniform are generally not very cost conscious because that is not a major operational requirement. It is, therefore, essential that we lay special emphasis on getting to know the essential ingredients of economic security at the national and international levels and its impact on national security. Needless to say, without both economic and military power, a country cannot guard its national interests fully.

Globalisation of Economy

The post-Cold War relationships across nation-state frontiers have shown such a remarkable degree of intensity, velocity and depth that the process came to be characterised as the age of globalisation. From the purely business-economic point of view, technological networks and transfers, trade and investment, business acquisitions, mergers and takeovers that in effect marked the process of globalisation in almost borderless fashion had reached $ 3.4 trillion in 1999 alone. The process that began earlier has doubled since 1980 in the US. It has also increased 500 per cent in the same period in the case of the European Union. While the process may confer unaccountable global institutions and multinational structures with supreme power, and is even resulting in the big fish eating the little fish, it represents such a significant empirical reality that no one can afford to shy away from it.

Globalisation has indeed become the new buzzword worldwide and acquired currency in international usage so as to depict the order of changes taking place across the globe in the past decade. It is viewed as an ordered way to gain a better understanding of the world. The globe is seen as a unit of analysis, meaning the international relations in its totality, and globalisation emerging as a process or trend. The magnitude and consequences of globalisation may be mixed, but there have been widespread global linkages and networking of new actors, World Trade Organisation (WTO), environmental activists and non-governmental organisations (NGOs), business and trading houses such as the Multinational Corporations (MNCs), and social groups and indigenous peoples. There are also new tools that include the Internet, cellular phones and electronic media. Multilateral arrangements and agreements such as the General Agreement on Tariffs and Trade (GATT) and Multifibre Arrangements (MFA) as well as over trade, services and intellectual property rights have set new ground rules, while the newly penetrating market mechanisms globally include foreign exchange and capital markets. There is, thus, a shrinking world in both space and time. A worldwide spread of objects and activities involving people and their normative orientation, ideas and information, behavioural patterns and practices, goods, services and money, etc have also made their impact on globalisation.

Globalisation does not carry with it a universal consensus. It is described primarily in benign terms as the process of bringing the world together, one that ushers in a new era in which everyone can interact peacefully across the globe. There are others who view the processes of globalisation as threats to democracy, violations of workers' rights, destruction of the environment, and loss of indigenous communities. Very often, critics and proponents tend to talk past each other without a common understanding

of globalisation. The under-developed countries, particularly, feel that globalisation is a tool of exploiting them by the rich and powerful countries.

Theoretically, globalisation encompasses the global system in its entirety, however paradoxical the engine that drives globalisation may be. Globalisation is not pursued by one single track—free global trade is just one of those tracks. It is viewed that sheer complexity, magnitude and speed distinguish the contemporary globalisation from the earlier period of the Cold War. Though often defined in strictly economic terms, globalisation has a wide variety of dimensions: technology, information, military, environmental, political, socio-economic and cultural. Each of these dimensions has links with, and ramifications for, others, and each goes through various tracks or processes, contributing to the multi-continental network of interdependence.

Human Development

In these days of religious intolerance, there is a need for our leaders to educate, motivate and convince the general public that the image of the country takes a battering due to the activities of a thoughtless few. This can only be done if our leaders lead by example and not bicker amongst themselves on caste and religion based politics. We need to look beyond our constituencies and consider the development of the nation as a whole. This can only be achieved when each and every citizen of this country is satisfied that the state will look after him when the need arises. The state can only then be rest assured that every citizen of this country will contribute his maximum towards development. This will involve emphasis on primary education, employment, primary health care and eradication of poverty. A nation can never hope to become an economic power when some of its citizens starve. There is a need to radically improve the public distribution system of food grains to avoid starvation deaths. The sum total of improvement in the social fabric will result in less discontentment and reduced internal disturbances. A nation free of internal disturbances will be a strong nation and can concentrate on developing itself into an economic power. This will also require a radical change in the approach of various states, as they will have to come together to sort out their differences. It will call for statesmanship from leaders of the states to rise above party affiliations and come forward to resolve outstanding issues.

Science and Technology

Science and technology can play a major transformational role in making India secure, self-reliant, and prosperous. Large-scale investments have been made in defence research, space research and atomic energy, with very positive results. The methodologies adopted for technology have to be extended to non-strategic fields of considerable economic significance such as the areas of power, transportation and communication. The developed nations are reluctant to pass on the knowhow on technological development to the developing countries. The price charged for parting with the knowhow is exorbitant. This calls for greater financial support to indigenous technological development from the government and industry. The government needs to build up a scientific temper and promote Research and Development (R&D). It will call for ending bureaucratisation of scientific institutions and enhancing national recognition to highly talented scientists. We must focus on select areas of research and achieve global excellence. The economic fallout of successful technological development is tremendous. Presently, the investment on R&D is about one per cent of the Gross National Product (GNP) compared to 2.5 to 3 per cent in the developed nations. Indian science must gear itself to face the challenges of globalisation, develop more patents and commercialise them.

Industrial Growth and Infrastructure Development

Abolition of Licence System. Under the reforms, industrial licensing has been largely abolished; large business houses are no longer required to take permission for investment and expansion; equity in public enterprises is being divested; quantitative restrictions on imports have been virtually abolished; import duties have been significantly reduced; and access to foreign capital has been made freer. The idea behind these reforms was to bring in a more competitive environment, improve efficiency and, hence, growth.

Impact on Production. After the high growth of industrial production which was reached in the mid-1990s, there has been a steady decline in industrial production. The compound annual rate of growth of gross value added by the registered manufacturing sector was 5.91 per cent between 1990–91 and 1998–99. But during 2000–01, the growth was 5.3 per cent and as per the forecast for 2001–02, it is not likely to exceed 4.5 per cent. It is to be noted that the growth achieved in industrial production in the post-reform period has not been able to surpass the growth achieved during the first fifteen years of Indian planning which had the strategy of development of basic and heavy industries.

Qualitative Change. There is a qualitative change in the growth of industrial production. The growth in the initial planning stage was led by basic and capital goods; the growth in the 1990s has been led by consumer goods, particularly consumer durable goods. If capital and intermediate goods are to be regularly imported to sustain the growth in consumer goods, then there has to be rapid growth in exports. While there was a sharp jump in the rate of growth of exports during 1993–94 to 1995–96, since then there has been a decline in the growth of exports. If this trend continues, in the long run it would make India vulnerable.

Infrastructure Development. The basic constraint of industrial production is the lack of sufficient growth of infrastructure. The growth rate of infrastructure industries to include roads, railways, port facilities, civil aviation, energy availability, telecommunication networks, and so on, has declined sharply from the mid-1990s onwards. This aspect needs attention for sustaining the pace of speedy economic development.

Economic Reforms and Good Governance

With the introduction of economic reforms in 1991, the country has progressed considerably from a licence-raj regime to an open market economy. However, minor irritants still deter foreign investors from large-scale investments. This will involve protection of their interests in the country and further reducing red tape. Governments may change at the Centre, but there should be no let up in economic reforms. Sick Public Sector Undertakings must be sold off or privatised to reduce the drain on the exchequer. The state must reduce its involvement in production and development and concentrate more on policy-making and improving social justice. This would require a high level of commitment on the part of the leaders. The common citizen cannot absolve himself of his responsibility. Paying taxes in time, he should focus all his efforts towards making the country economically strong. The scourge of corruption that afflicts India makes it one of the most tainted nations in the world. It will require a national movement to eradicate corruption from every sphere of our lives. If the world has to be convinced that India is emerging as a global power, then it has to act with maturity and improve its image at home before starting elsewhere. History bears testimony that leaders of ancient India have been tied down more by internal disturbances, leading to easy capitulation under external aggression.

Conclusion

The security of a nation will have to be built around the economic fundamentals of human development, science and technology competence, a sound industrial infrastructure and by implementing economic reforms and good governance. These require long-term economic investments and considerable gestation periods.The management of resources includes focussing on large fiscal deficits, bloated government machinery, and barriers to trade and investment. The Five-Year Plans of the Planning Commission can bring about the perspective on the Indian economy for enhancing national security. There is a need for the creation of a national security outlook at the apex economic planning level. A strong economy will give India a better footing in the international community. As the world looks towards the Indian market, India must carry forward economic reforms without compromising on core issues. It is only through economic growth that we can hope to become a strong nation.

What I have covered is in very general terms. I am confident that the discussions you will have during the next two days will go into the nitty gritty of this important subject and contribute to greater understanding of economic security and its linkage with the overall national security. I look forward to your deliberations and wish you success in your endeavours.

ECONOMIC CHALLENGES AFFECTING INDIA'S NATIONAL SECURITY

FIRST SESSION

Chairman	:	Lt. Gen. K.K. Hazari PVSM, AVSM (Retd.)
First Paper	:	Shri Amiya Kumar Ghosh, IDAS (Retd.)
Second Paper	:	Shri A.N. Ram, IFS (Retd.)
Discussants	:	Shri Chudamani Ratnam Dr Rahul Mukherji

First Session: First Paper

Shri Amiya Kumar Ghosh, IDAS (Retd.)

National security is a political concept. National security implies strongly that the object of security is the nation. In a developing nation like India, the state has to play an instrumental role in creating the nation. The security of an individual is irreversibly connected with the security of the nation-state. In the process of nation building, the internal security of the nation becomes a natural and expected dimension.

A nation cannot be secure internally without economic strength. For achieving economic strength and to provide economic security, substantial economic growth is required. The experience of the recent decades suggests the same conclusion. A higher annual growth of per capita income of about 3.5 per cent in the 1980s led to a significant decline in the poverty ratios. On the basis of this experience, many economic analysts in India have come to the conclusion that higher economic growth must be the key objective of economic policy. To quote from an eminent economic analyst subscribing to this view, "It is only the higher economic growth that can reduce poverty and provide sustainable economic security. No distribution can take place when there is nothing to distribute".[1]

Analyses of the political history of nations show that economic strength is the most important component of the political and military strength of a nation. Paul Kennedy, in his famous book *The Rise and Fall of the Great Powers* (1987), after a survey of five hundred years of history, came to the conclusion that the uneven pace of economic growth has had crucial impacts upon the relative military power and strategic position of the members of the states system and that all changes in the world's military power balances have followed alterations in the production balances. Military capability has to be based on the firm foundation of economic growth. A growing GDP (Gross Domestic Product) is essential for making a significant defence expenditure bearable for a nation and to ensure that the required expenditure can be made, keeping defence expenditure and GDP ratio at a reasonable level. In an economy which is growing strongly, even with a stable defence expenditure and GDP ratio, the defence expenditure can grow at a reasonable pace.

The approach to national security is required to be made on the basis of a state's national interests which can be grouped in three categories: security, well-being and value. For states which are in the nation building stage, security would include both internal and external security, and the well-being of the people strongly interacts with the internal security, aspects. Well-being is to be thought of in economic terms like jobs, income, health care, educational opportunities and environmental quality.

In the long run, it is only a substantial economic growth rate that can reduce the poverty and deprivation of the people. But the question that is relevant, in order to develop a proper growth strategy in this century of quick changes, rapid technological progress, increased political awareness of the people, tremendous improvement in mass communication with a proactive media, and increasing violence, is whether that much time is available for addressing these issues which have the potential of jeopardising national security in a fundamental sense.

Economic challenges to national security have to be analysed in this context. Deprivation, starvation, illiteracy, malnutrition and ill health and environmental quality are basic challenges which can affect national security in the wider sense of the term. This would require, apart from adequate economic growth, well designed public action in which the state has to play the most crucial role. Economic growth by itself would not be enough. This observation is supported by empirical evidence from several countries. For example, Amartya Sen and J. Dreze have observed that the radical transformation in the health and nutritional status of the Chinese population took place before the reforms of 1979, at the time of a relatively moderate growth of GNP (Gross National Product) but enormously effective public involvement in the promotion of living conditions. The post-reform period in China, on the other hand, "has seen an impressive acceleration in the growth of GNP and private incomes, but also a crisis of public provisioning

(especially of health services), and *increase* in mortality".[2] This experience underlines the need for public action and better governance for meeting the socio-economic challenges.

The Indian experience is no less relevant. Democracy has taken deep roots in India and has proved to be the only way to reconcile the aspiring interests of various groups. On the occasion of the 50th anniversary of Indian Independence (and of Pakistan) *The Economist*, in a lead article in 1997, commenting on the achievements of Indian democracy, stated that one of India's key achievements in the past 50 years has been the conquest of mass starvation. This was the recurring problem in every drought. Thousands died in the droughts of 1965 and 1966 despite 21 million tonnes of food aid. Yet within a decade, India had conquered starvation. "The credit for this is widely but mistakenly given to the Green Revolution. In fact, food production between 1965 and 1980 grew by just 2.8 per cent annually, no faster than in the preceding 15 years.Several developing countries, including many in Africa, fared much better. India ended starvation by better distribution, not accelerated food production".[3]

In the same article, *The Economist* commented that democracy in India has not prevented mass hunger and illiteracy, nor has democracy checked growing corruption. It observed that in some states, the distinction between law-makers and law-breakers has virtually disappeared.[4] The recent happenings in Gujarat have rightly aroused the nation's concerns. But the problem of governance at various levels and spheres of activity is widespread across the states and if not addressed on an urgent basis, the positive effects of economic reforms cannot gather momentum and would also increase the vulnerability of the nation from the security point of view.

In the above background, which approach should be followed towards the economic development of India that would ensure the national security of the country? From the point of view of national security, adopting a growth policy which helps the people in achieving better livelihoods should be our goal.

The greatest economic challenge facing the country, which affects its security, is the removal of poverty. The percentage of people below the poverty line might have come down but the absolute number of people below the poverty line is almost the total number of people India had at the time of Independence.

Poverty is a multi-dimensional phenomenon. It has social and political dimensions. All the same, in the long run, the most effective anti-poverty programme is high economic growth. It is economic growth which creates opportunities of productive employment for poor people but to avail of these, a person needs to be educated, have the requisite skills and be in good health. What is required is to adopt a type of growth which is pro-poor, so that poverty diminishes in a significant way in the medium term, say, within a time-frame of five to seven years.

As a part of this growth strategy, we should as a first priority "promote faster agricultural growth driven to the extent possible by expansion of irrigation, watershed management and new varieties, so that food prices remain low. Agricultural growth driven by high food prices would not be as helpful in reducing poverty".[5]

Sustained economic growth can be achieved only with the participation and support of the people. Such support will be available when the economic growth generates adequate employment and income. "The growth rate of employment dropped from 2.0 per cent per year in the 10-year period prior to 1993-94 to less than 1 per cent in the period 1993-1994 to 1999-2000.Total employment in the organized private sector was 7.58 million in 1990-91 and in the eight years ending 1998-99, the number went up to only 8.85 million. The number of employed workers in the agricultural sector declined by 0.34 per cent from 242.46 million in 1993-94 to 237.56 million in 1999-2000".[6]

Creation of adequate employment opportunities in the process of economic growth should, therefore, be treated as another important objective of the economic policy to be adopted for various sectors of the economy.

Eradication of poverty cannot simply be treated as one of the goals of development policy. No doubt, we have lived with poverty for decades. But in the 21st century, with instant communication, active social and political groups acting on behalf of deprived people, and easy availability of arms, poverty can pose a security challenge of the highest order. Political advantage can be easily taken of abject poverty. We are witnessing what is happening in Nepal today. In India, the People's War Group (PWG) a Naxalite outfit, is active in Bihar, Chattisgarh and Andhra Pradesh. In the years when there is a drought or any other natural calamity, this group can become very active and pose a big challenge to the government. As per a recent report, PWG Naxalites have forced 39 elected *panchayat* heads of Bastar area in Chhattisgarh to resign from their posts. Earlier, PWG members killed about a dozen *panchayat* representatives in this tribal belt for refusing to act on their dictates, and threatened others. They are a running parallel administration.[7]

In analysing the insurgency and low intensity conflict situation in Jammu and Kashmir (J&K), analysts have repeatedly drawn attention to the socio-political aspects and particularly to the lack of development effort in alleviating the poverty of the people.

The necessity of adopting an economic development policy which removes poverty within a medium time-frame is, therefore, vital from the national security point of view.

The disparity in the growth rates of the state GDPs is another cause for great concern. Whereas growth accelerated in the economy as a whole, it actually decelerated sharply in Bihar, UP and Orissa which were the poorest states. These three states have a combined population of over 300 million. The degree of dispersion of growth rates amongst the states increased very significantly in the 1990s. It was as low as 2.7 per cent per year for Bihar, to a high of 9.6 per cent for Gujarat. The difference in performance in per capita was much more marked when the growth in population is taken into account. It ranged from 1.1 per cent in Bihar and 1.2 per cent in UP, to a high of 7.6 per cent per year in Gujarat and 6.1 per cent in Maharashtra.[8]

Experience shows that poverty reduction was negligible when the GDP growth rate was less than 2 per cent. If poverty is to be reduced significantly, then a lot of attention is to be given to the states which are growing slowly. "An appropriate geographical distribution of non-farm growth can reduce poverty faster. To encourage a balanced non-farm growth, we need to push development of education and physical infrastructure in all states".[9]

For developing a proper framework to be adopted for economic development which would ensure national security, we should keep in view not only the experience of our own country, but also those of China and the East Asian countries and relate these to the present economic and social indicators in India.

Development models of the 1950s and 1960s drew attention to the central role of capital accumulation and made investment or savings as the major objective but the experience of recent decades suggests that a focus on investment misses other important aspects of the development process. Investment rates and growth rates for individual countries between 1950 and 1990 varied considerably. Some countries with low investment grew rapidly, while a number of countries with high investment had low growth rates. The attention of policy-makers gradually shifted to human capital and in the last two decades, investment in human capital has shown impressive results.

The World Development Report 1999-2000 of the World Bank indicates that evidence has not validated the theories that inequalities increase in the early stage of development. The experience of East Asia shows that growth, equality and reductions in poverty can proceed simultaneously. "Improving access to education builds human capital and helps the poor, and providing land to poor farmers increases not only equality but also productivity". Reduction in the mortality rate of children under the age of five, for example, appears to have little to do with the speed of economic growth.[10]

Recent studies suggest that the rates of economic growth over the last 30 years reveal little about the rates of improvement in vital measures of development such as political stability, education, life expectancy, child mortality and gender equality.[11]

One reason why there is a weak relationship between economic growth and various indicators of economic development and better living conditions is that countries place different priorities on education and health. The case of Sri Lanka is often cited, where despite its low level of GDP per capita, the life expectancy was 73 years and infant mortality was 14 per 1,000 live births, which is very near the level of the world's high income countries. Further, achievements in health and education are interrelated. What we require from the national security point of view is growth strategies based on minimal primary education, removal of gender inequality, and improved nutritional and health standards. Studies suggest that as much as 30 per cent of per capita rate in the UK between 1870 to 1979 was associated with improvements in health and nutritional status. Micro studies in the developing countries also support such findings.[12]

These findings underline the importance of providing the physical infrastructures for bringing about equitable growth which is necessary from the national security point of view. This emphasises the need for public action in providing both physical and social infrastructure.

Economists have emphasised the role of greater investment in infrastructure as the most important way for achieving higher economic growth. "The Indian infrastructure report had projected that the achievement of GDP growth of over 7 per cent will require an increase in investment in infrastructure from prevalent levels of about 5 to 5.5 per cent of GDP in the mid-1990s to about 8 per cent of GDP by 2005-06".[13] The government has to play a major role in providing the infrastructure.

But, in the context of what has been stated above, investment in infrastructure should not only include roads, bridges, power supply, etc.

but also encompass social infrastructure. As Joshep E. Stiglitz has observed, "In a sense, much of the role of the government can be viewed as establishing infrastructure in its broadest sense—the educational, technological, financial, physical, environmental and social infrastructure of the economy. Since markets cannot operate in a vacuum, this infrastructure is necessary if markets are to fulfill their central role in increasing wealth and living standards".[14]

Since removal of poverty should be the key objective of economic development, investment in social infrastructure should receive the highest priority.

What are the broad social and economic indicators in the global context which need to be kept in view in designing the approach to economic development and infrastructure development? We can cite the following:

(a) In the year 2000, in per capita GNP terms, India ranked 162nd in the world. Even on purchasing power parity basis, India ranked only 153rd in the world. Despite high growth rates during the last two decades, the dismal performance on per capita basis is due to the large size and rate of growth of population in the country and the low base of income with which we started.

(b) The World Bank prepares a composite index called "Human Development Index" (HDI) to measure average achievement in basic human development. The index comprises "Per Capita Index" "Education Index" and "Life Expectancy Index" considered to be the three basic essentials of life. India's HDI ranking out of 174 countries in 1998 was 128th.

(c) The World Bank measures the "Human Poverty Index" which indicates the index of deprivation. In the ranking of this index in 1998, out of 85 developing countries, India was at the 58th position.

(d) In 1998, adult literacy in India was only 55.7 per cent, which was far below that of Sri Lanka (91.1 per cent) and China (82.8 per cent).

(e) The picture is not very different for youth literacy which was 71 per cent as against 96.5 per cent in Sri Lanka and 97.2 per cent in China.

(f) In 1998, in India, 70 infants out of 1,000 died. Only one country has life expectancy less than that of India.[15]

Education has become more important today than ever before. An illiterate person cannot participate in the knowledge based society, driven by information technology. Thus, there is a great urgency in bringing about total literacy in the country within the next five years. The number of illiterates is estimated to be around 296 million. In Bihar, the male literacy rate was only 49 per cent and the female literacy rate was only 35 per cent. In Rajasthan, only 11.6 per cent of rural females were literate. We need to increase the motivation for schooling as well as provide convenient and quality schools.

The resources required for minimal and universal primary education are not very large. It is estimated that an expenditure of 2.8 per cent of GDP instead of the current expenditure of 1.5 per cent of GDP on primary education can do what is required of it.[16]

Given the large share of agriculture in overall GDP, fluctuation in agricultural output will have a significant impact on overall economic growth. The 5 per cent plus growth in GDP in 2001-02 "has been due to good agricultural harvest as industrial growth slipped to below 4 per cent."[17]

Agricultural growth has played an important role in poverty reduction. Since a majority of the people live in the rural areas, agriculture will continue to play a dominant role in reducing poverty. The benefits of the Green Revolution were concentrated more in the irrigated areas and on a few crops. The problems of large unirrigated areas, which cover two-thirds of the cropped area, remain. In the risk-prone dry lands and rain-fed areas which face instability in yields, higher yields can be achieved through the development of infrastructure and improved access to agriculture inputs.

Agriculture output in the 1990s increased at a lower rate than in the previous decade. The real value added from agriculture increased by an average of 3.2 per cent in the 1990s as compared to a higher growth of 4.7 per cent in the 1980s. The slower rate of growth in the 1990s is due to a lower rate of agricultural investment. One of the reasons for this is the skewed nature of price support which is evident from the rising food grains stock. There is "clearly need to reexamine the price support mechanism and re-orient policies that support agriculture as a sector rather than merely food production".[18]

Greater reduction in poverty in the rural sector is likely to be achieved if target areas are chosen such as municipalities or villages. The benefits of the Green Revolution which had a favourable impact on the poor were concentrated more in the irrigated areas of the north and north-western regions of the country and on a few crops. We can design agricultural research in such a way that it helps in reducing poverty. Focussing research efforts on crops that are grown in the poorer regions would help in improving

productivity in these regions and reducing poverty. Concentrating research on technologies that are less capital intensive and less input intensive will make new technologies more attractive for adoption by the poor. At least half the area under maize in India is sown with unimproved local varieties which have low production potential.

"Unlike the case of the Green Revolution, the new technology would have to be tailored to specific locations".[19] In this context, it is to be remembered that only 0.3 per cent of agricultural GDP is spent on agricultural research as compared to 0.7 per cent in the developing countries. The "public research can concentrate on technology for resource-poor rain-fed areas and for management of natural resources, which cannot be marketed and, hence, cannot attract private funds".[20]

In the rural areas, the incidence of poverty is the highest among the agricultural and other labour. For improving their lot, there have to be better rural roads, storage, transport and other marketing infrastructure to generate more rural farm and non-farm employment. Since a substantial proportion of the poor is self-employed in agriculture. and vulnerable to fluctuations in yields, "agricultural research that helps in the diversification of income sources (e.g livestock and horticulture) would aid the poor farmers in managing risks".[21]

As a long-term measure for ensuring food security, there is need for harnessing rainfall water which runs off during the monsoon season. This brings us to the issue of the growing threat of water scarcity. This has a global dimension. The global population has doubled since 1940 but fresh water usage has risen four-fold. There is an upper limit to usable fresh water and most available fresh water is found in the industrial countries which have only one-fifth of the world's population. However, nearly all of the three billion increase in the global population expected by 2025 will be in the developing countries where water is already scarce. Water shortage will adversely affect agriculture which takes 70 to 80 per cent of all available fresh water in the world. As it will take 17 per cent more water to feed the world's population in 2025, the *food security* could be a casualty. "The prospect of water scarcity is very real with implications for regional peace, global food security, the growth of cities and location of industries".[22]

At the sub-national level, we are actually aware of the problem caused by the Cauvery water dispute. The newspapers reported widespread protests and violence in Karnataka following the Supreme Court orders to the state to release 9,000 cusecs of water to Tamil Nadu daily on the basis of the recommendations of the Cauvery River Authority which is headed by the Prime Minister. This is a recurring problem, and a long-term solution needs to be found. A political consensus is required for the linking of the Ganga and Cauvery rivers. If this is approved, it would call for a massive investment effort in infrastructure for which the resources do not seem to be available. This would call for a relook at our priorities.

If economic reforms have to gather momentum, it is imperative that the country addresses the fundamental issues of governance. "Each failure in the working of the economic system can be traced back to a deficiency in governance at one level or the other".[23]

But "governance" is not just another issue, it is a plethora of issues affecting different levels and having different dimensions. For example, Shri Chidambaram, attempting to identify the pressing issues of governance, mentions the stabilising of the population of India, the necessity of attracting talent in the legislative bodies and the executive, establishing the rule of law, and proper functioning of the Parliament. We should give attention to legislative business, correcting the deficiencies of the judicial system, and so on. These problems affect the whole system of social and political life. This also brings out the central role the government has to play in bringing about the socio-economic changes. A highly interventionist state is inherent in the Indian situation where the state has assumed the responsibility for economic development.

While recognising the importance of investment in infrastructure for economic development, we do not find adequate resources to finance the same. The combined fiscal deficit of the Centre and states amounts to almost 10 per cent of GDP. As one perceptive analyst observes, "The current trend is such that before long, almost all borrowing will essentially finance current expenditure leaving almost nothing for investment".[24] The fiscal situation is such that if unchecked, it will pose a great threat to economic growth.

What can be done to combat this? Some steps which have widespread acceptance can be suggested :

(a) Fiscal responsibility and prudence must now be made into a law which will clearly define the upper limits of the fiscal deficit that will be permitted to be incurred by the central and state governments.

(b) The tax-GDP ratio which has remained stagnant for almost two decades, must improve, for which concerted efforts have to be made at both the central and state levels.

(c) Downsizing of the government staff in the state governments is a must as the salary bill of the government servants is consuming whatever resources are available, with very little left for investing in development.

(d) Greater involvement of Non-Governmental Organisations (NGOs) in development work. The *Panchayati Raj* institutions should be given adequate authority, responsibility and resources to improve the health, education and other rural infrastructure.

(e) The Constitutional Review Commission has already submitted its report. A national consensus must emerge as to how to ensure a stable government for five years, so that it can take adequate steps towards economic development without being subjected to pressures from lobbies or from dissident groups or political instability.

Notes

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9. Note 5.
10. Entering the 21 Century, *World Development Report 1999/2000,* World Bank, p. 14.
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14. Joshep E. Stiglitz, "Role of Government in Economic Development", address at the Annual World Bank Conference on Development Economics, 1996.
15. The indicators are illustrative in nature and have been taken from the article "Indian Economy 1950-2000-2020" by Y. V. Reddy, Deputy Governor of RBI, note 1.

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First Session: Second Paper

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To say that India's security and economic environment have been and continue to remain less than propitious would not be incorrect. After over fifty years of existence as a sovereign independent nation, India remains vulnerable, due to both external and internal factors. Externally, India is located in a highly fluid and tense region and is one of the few countries with unsettled boundaries; some of her neigbhours are in forcible occupation of her territory. With some of our neighbours, our relations continue to remain strained and troubled. The geo-strategic situation of India is also adversely affected by India's external environment and the presence of foreign powers in the immediate vicinity of India, including in the Indian Ocean. Domestically, our pluralistic, democratic and secular fabric has been exploited by some of our neighbours to destabilise India through covert interference, subversion, terrorism and by using India's open and multi-religious and multi-ethnic fabric to undermine our unity and integrity. The fact that about 25 per cent of India's population lives in abject poverty with a per capita income of less than US $1 per day has also created a situation in which our pervasive and hopeless poverty and social tensions have become a fertile ground for breeding instability, tension and social and political turmoil. The economic and social conditions in India pose a serious threat and challenge to peace, progress, harmony and stability in our society.

The economic challenges affecting India's national security, therefore, need to be discussed in the above prism. Let us in this paper discuss some of the major external economic challenges affecting India's security. For the purpose of this paper, we will not discuss or comment upon the internal or domestic dimensions of this issue. However, before doing so, it is necessary to recapitulate that less than 20 per cent of our GDP (Gross Domestic Products) comes from external trade and investments; this is a small portion compared to other industrialised nations; India's share of world trade and investment flows is less than 1 per cent; India is a marginal player on the world economic scene and has little influence or control over international economic decision making; in the context of both the WTO (World Trade Organisation) and the IMF (International Monetary Fund)/ World Bank, our role is still peripheral and the system is weighted against India. However, it is worth noting the point made by Swaminathan S. Anklesaria Aiyar in the *Times of India* of 13 October 2002 that in the two decades from 1980 to 2000, the proportion of poor people in the world has fallen from 44 per cent to 13 per cent. Furthermore, in this period of globalisation, Aiyar says, the poor countries have grown twice as fast as the rich ones. His conclusion is that the developing world as a whole has been catching up with the rich West, though slowly. This is a very significant conclusion from India's point of view. In India too, people living below the poverty line have come down from about 40 per cent to 26 per cent in roughly the same period. The Indian middle class has grown impressively and today has disposable incomes which make it an important factor for rapid growth. The Indian economy is now growing at about 6 per cent per annum making it one of the fastest growing economies of the world. India is poised to enter the "knowledge era" as a significant player and is already considered to be an IT (information technology) superpower. At the same time, the pace and content of our economic and fiscal reforms need to gain real momentum if we are to make full use of the new opportunities; our policies and procedures, particularly, our bureaucracy, are major impediments to growth and a cause for the negative perception and image of India; our tariffs are among the highest in the world; our export base and basket are still very small, even by developing country standards; our infrastructure is extremely poor and urgently needs a massive dose of investments and upgrading; our industry is in urgent need of updated technology and modernisation so that it can become internationally competitive; our productivity, even by Asian standards, is low. The foregoing is very relevant in the context of the external factors affecting India's security. What is borne out by the above data is that the inevitable integration of the Indian economy with the world economy and the ongoing process of globalisation are not an unmitigated evil; indeed, India seems to have

benefited from integration and globalisation. The same can be said of the benefits derived by India as a result of our membership of the WTO and an international trading regime governed by the WTO. India's exports and external trade have done remarkably well since the new WTO arrangements came into being in 1996. Our exports today are well over the US $ 40 billion mark and our two-way trade over the US$ 90 billion mark. The new international economic architecture, though not entirely to India's liking, has given us the opportunity and the space to grow faster than before. To the extent the new environment, admittedly flawed, has enabled us to grow, it has helped reduce the economic burdens and vulnerabilities of India and has consequently made India, in a small measure, more resilient, strong and, therefore, less susceptible to external pressures.

At this point, it is pertinent to discuss the considerable all round advantages of international economic cooperation. Whenever and wherever countries have evolved partnerships and cooperation, their prospects and possibilities of rapid and sustained growth and development have improved. Take, for example, India's cooperative arrangements with the European Union (EU). Since the signing of the first cooperation agreement in the 1960s with the then European Community, our trade with the EU has grown at approximately 15 per cent per annum reaching a figure of about US $ 25 billion per annum today. Even though the South Asian Association for Regional Cooperation (SAARC) is not fully operational as a preferential trading area, our fastest growing export markets are in Bangladesh and Sri Lanka. In the case of the Association for South-East Asian Nations (ASEAN), the intra-ASEAN economic exchanges have reached a very high level of mutual advantage. Some of the "tiger economies" of the world are in the ASEAN region. The same is true of the Common Market of the South (MERCOSUR) in Latin America and Southern Africa Development Community (SADC) in Southern Africa. Wherever bilateral or sub-regional cooperation has been promoted like in the case of India and the EU and the US, economic exchanges have grown incrementally, to the mutual advantage of the cooperating countries, with other spin-off benefits also accruing. India's proposal to develop linkages with the ASEAN Free Trade Area (AFTA) and interest in full participation in the Asia-Pacific Economic Community (APEC), could be very significant in our quest for an enlarged economic space. Likewise,India will have to continue to focus on traditional partners including the EU, the US, Japan and Russia which account for approximately 80 per cent of our present and growing international economic exposure. These are also the fastest growing partnerships for India, in terms of both trade and investments. The bulk of the tourists visiting India also come from these countries. Similarly, the Gulf and Central Asia are important segments of our external cooperative framework. It is, therefore, fair to assume that international economic cooperation, bilateral, sub-regional, regional and extra-regional is a *sine-qua-non* for the rapid and sustained development of the world economy, particularly of the poor countries. It is imperative for India to forge such linkages and partnerships which will help contribute to our growth, development and security. Importantly, such cooperation, through the development and reinforcement of linkages, creates a vested interest in peace and harmony, thereby blunting the vulnerabilities of individual countries. It has been argued that the biggest and the best insurance against the worsening of bilateral relations between the US and China has been the extremely high stakes that the two countries have had in not causing disruptions to their mutually beneficial commercial and economic interests. Economic imperatives have had a benign effect on political vicissitudes The same argument, hypothetically, has been used in regard to the overland gas pipeline from Central Asia and Gulf to India via Pakistan. Here it is argued that the economic stakes for the transit country, Pakistan, will be too high for Pakistan to disrupt an international arrangement. Some would disagree with this logic but it may have some merit. Likewise, power supply linkages between Pakistan and India could also become a factor in peace and stability. Economic integration and interlinkages can, thus, have beneficial effects on politics. In the early 1960s, South-East Asia was facing serious problems of Communist insurgencies: in Thailand, Malaysia, Indonesia and in the Philippines, the Communists were causing subversion through both exporting ideology and by exploiting economic, social and religious vulnerabilities. After ASEAN came into being in 1967, they pursued a conscious policy of promoting cooperation and linkages with southern China so that such linkages could act as a restraining element in China's then lengthening shadows over South-East Asia. This policy seems to have succeeded as today China is no longer feared in South-East Asia: in fact, China is their most important economic and commercial partner. There is a large number of Chinese origin people who live in South-East Asia and who are now acting as catalysts and bridges for increased linkages between China and South-East Asia. The Indian diaspora, likewise, can become a positive factor in developing linkages between their adopted countries and India. This should be seen as an asset

and as a reassurance against vulnerabilities. The Indian diaspora in the US and, to a lesser extent, in the UK, has played a significant role in consolidating and improving relations between India and the US and the UK. Today, they have emerged as a major factor in our relatively stable bilateral relations with these two countries. China's subsequent entry into the ASEAN Regional Forum (ARF) and its summit level dialogue with ASEAN have opened up new vistas of cooperation, so much so that even on the vexed Spratly Islands issue in the South China Sea, the Chinese have adopted a low profile, non-confrontational attitude. India too has similar arrangements with ASEAN and these could impact positively on India's security and well-being. India has much to learn from ASEAN. ASEAN, generally, has coped very successfully with globalisation and the massive infusion of foreign investments. The recent East-South-East Asian financial and currency crisis also offers lessons to India on how to avoid pitfalls in a globalised world. ASEAN's management and implementation of economic reforms has also been highly successful and could hold useful lessons for India. The example of Argentina and Brazil, two traditional adversaries, is also relevant. The coming into being of the MERCOSUR, has not only transformed the scene totally but has also made Brazil and Argentina two partners whose destinies are now closely interlinked. While it may be premature to talk about such dividends of economic cooperation beneficially affecting India and Pakistan as yet, it can be argued that bilateral and international cooperation can act as a catalyst and falicitator of better relations between adversaries, thereby helping reduce tensions and restraining them from taking any precipitate action.

For India, SAARC, accounting for less than 2 per cent of our economic exposure, can never provide adequate economic space; India will have to look beyond, towards South-East Asia and the Asia-Pacific in the East and towards Central Asia and the Gulf in the West. But SAARC can provide that reassurance to India and to her neighbours which is so necessary for lasting peace and stability in South Asia. If Pakistan has reservations about full participation in the SAARC process, India will need to take unilateral steps to evolve a *de-facto* free trade area in South Asia, including all the other regional countries and leaving the doors open for Pakistan to join in the future. India already has free trade arrangements with Nepal, Bhutan and Sri Lanka. A free trade agreement with Bangladesh, our most significant partner in South Asia, is under discussion and should be finalised as soon as possible. In the meantime, India could extend unilaterally and without reciprocity Generalised System of Preferences (GSP) concessions to our neighbours. To maximise synergies and optimise opportunities, we should also try and include Myanmar and Afghanistan in such a free trade arrangement in South Asia. A single Common Market in South Asia could be the beginning of a South Asian Economic Community and eventually a South Asian Union. Such an integrated South Asia cannot but enlarge India's economic security and minimise regional vulnerabilities. As for Pakistan, even as we seek to promote cooperation and partnership, we must be prepared to wait for a long while before Pakistan comes on board. Pakistan must be made to realise that the cost of non-cooperation and missed opportunities is very high in both economic and political terms. The business community of Pakistan wants normal trade relations with India. The high level of "informal" trade between India and Pakistan is evidence of the fact that economics speaks louder than politics!

A major external challenge facing India is the fact that India is still in search of a secure economic space which will meet and sustain her long-term economic aspirations. It may seem ironic that even as the *mantra* of the day is "globalisation" and "integration", the major economic powers appear to be rapidly consolidating themselves into regional groupings and arrangements which contradict their commitment to meaningful "multilateralism" and free trade. The reason for this is the perception that a major preoccupation in the coming years would relate to the consolidation of international markets, their expansion and their medium and long-term integration with regional groupings. Thus, for example, we have the phenomenon of NAFTA (North American Free Trade Area) in North America even as the effort there is to forge a free trade area from Alaska to Antarctica, incorporating the whole continents of North and South America. Furthermore, linkages are sought to be enforced by other regional trading blocks which would consolidate and help augment the existing markets of these countries in other regions. Likewise, the EU, at present a grouping of 15 countries of Western Europe, is expanding eastwards towards Central and Eastern Europe and could, conceivably, in the next two years, have 25 members. Even as this process seems to be underway, the EU is entering into, and finalising, arrangements with the countries of the Mediterranean in North Africa and even beyond. The APEC, though not an entity in the sense of the EU, is also gradually defining an area for itself. The ASEAN, looking ahead, is not averse to integrating itself with APEC and to working out arrangements with other groupings. The moribund Indian Ocean Rim

initiative, likewise, is an effort to carve out a geo-economic space for purposes of exploring and optimising supra-regional cooperation among littoral and hinterland states of the Indian Ocean. Although sub-regional groupings like the MERCOSUR, the SADC and the Economic Community of West African States (ECOWAS) are essentially sub-regional trade and economic cooperation organisations, their objective is also clearly to take advantage of, or to eventually join, the larger groupings of the geographical regions to which they belong. In our own region, SAARC seeks to promote regional and sub-regional economic and trade cooperation mainly through the South Asian Preferential Trade Area (SAPTA) and the South Asian Free Trade Area (SAFTA). However, these countries of the sub-region will have to hasten the process of cooperation and look beyond to make full use of the emerging opportunities in their vicinity. The overarching sub-regional economic grouping involving Bangladesh, India, Myanmar, Sri Lanka, and Thailand (BIMSTC) and the North-Eastern Growth Area involving Bhutan, Bangladesh, Nepal and India (BBNI), are very significant cooperation arrangements which could profoundly impact the participating countries positively. Even as we build and strengthen SAARC, India will continue to need to consolidate and evolve a special relationship with ASEAN and seek an entry into APEC on the eastern side. The Indian Ocean Rim (IOR) initiative would need to be fully explored and operationalised along with sub-regional cooperation agreements like BIMSTC and BBNI. At the same time, we cannot overlook the fact that nearly a third of our trade at present is with the EU and we will need to pay special attention and evolve policies and prescriptions to cope with layers of preferentiality in the EU market towards our competitors. The most recent decision of the EU to extend special GSP concessions for textiles to Pakistan to reward Pakistan for its role in the global war against terrorism is a case in point affecting India's interests adversely. The US, accounting for nearly a fifth of our trade, likewise, will have to remain an area of special focus for our economic diplomacy. Both the US and the EU are also a major source of investment and technology for India. This is true also of Japan, and perhaps Russia. The challenge for our diplomacy will be to reconcile both the trend towards inevitable long-term globalisation and the consolidation of regionalism and sub-regional cooperation in such a manner that we are able to take advantage of both at the same time even as we strengthen SAARC and our ongoing and expanding links with South-East Asia, the Pacific Rim, Central Asia, the Gulf and the Indian Ocean.

A major difficulty that India is likely to face in this context is the problem of assured and predictable market access. As Indian goods and services become internationally competitive, India will find it increasingly difficult to access markets and get a secure foothold there. Manifestations of this are already evident. Our major trading partners are erecting walls, both tariff and non-tariff, which will make market access even more difficult. With the expected phasing out shortly of the GSP, India will face transitional and long-term difficulties which will get compounded when some other factors like non-tariff barriers (NTBs) in the form of health, safety, quality and sanitary regulations, environmental restrictions, packaging requirements, inspection procedures, etc. come into increasing play as is happening in the EU and US markets. Another kind of impediment could relate to anti-dumping measures which have become very serious. Whenever Indian exports in these markets have reached a certain level and have shown strong growth, they have faced the threat of anti-dumping and other action even when such action may not be warranted or always justified. This is particularly true in the case of India's exports of textiles and leather, two commodities which have shown a strong export growth. India's basket of exports is so heavily dependent on textiles, leather, gems and jewellery (accounting for 50 to 60 per cent of our total exports) that any country targetting these commodities can effectively and gravely harm India's exports. The growing tendency on the part of the developed countries to use national legislation, in contravention of the WTO spirit, to trade and to impose unilateral penal measures is a cause for alarm and will need to be resisted by the developing countries. The principle of open and free international trade must apply to all countries which subscribe to the WTO. The demand of the developed countries for a new Millennium Round of Multilateral Trade Negotiations (MTNs) and the subsequent debates in Seattle and at Doha have confirmed the worst fears of the developing countries which are being increasingly pushed to the wall. The so-called "new" issues including the Singapore issues like the social clause, Multilateral Agreement on Investments (MAI), trade and competition policy, environmental issues, government procurement, trade facilitation and the already agreed review of the TRIPS (Trade Related Intellectual Property Rights) agreement are all issues pregnant with possibilities which may adversely impinge on the interests of developing countries like India. The new round, without completing the earlier mandate of the Uruguay Round and without a consensus is clearly an effort on the part of the developed

countries to force an agenda on the developing countries on their terms and use the WTO to their advantage. The challenge posed by the new round will have to be converted into an opportunity for the developing countries who will also have to salvage their interests. India will need to build and catalyse a consensus position of developing, and other like-minded countries, including in fora like the G-77, G-15, G-24, United Nations Conference for Trade and Development (UNCTAD) and in the UN and WTO to make our collective concerns effective. India has always placed emphasis on South-South cooperation. It is necessary for us to play a leadership role in this crucial area: for, it is through such cooperation alone that the countries of the South can develop and achieve self-reliance and confidence through partnership. However, South-South cooperation must provide incremental benefits rather than merely seek to supplant existing and traditional cooperative arrangements.

While economic security, in a broad sense, cannot imply insularity, self-sufficiency or self-reliance in all situations, it is also true that in core and strategic areas, greater self-sufficiency, self-reliance or assurance is of vital importance. Thus, in areas such as food, defence, energy and other strategic requirements, India will have to promote self-reliance and sufficiency. India has always been dependent on foreign sources to meet her growing and now considerable energy requirements. While India does have limited oil reserves of her own, these small reserves are not sufficient to last long or to meet our present and fast growing future requirements. We import roughly 70 to 75 per cent of our oil and gas requirements and if our own production remains stagnant, this is set to grow to about 85 per cent in the next decade. This is a major area of our vulnerability. India, therefore, has a vital interest in global energy security. As demands for energy grow and as the finite hydrocarbon reserves dwindle, there will be a relentless struggle to "control" and "exploit" the existing and potential sources of oil. The fact that the bulk of the global energy demand and consumption is from the developed countries who also influence the behaviour of oil prices and supplies, is inevitably going to affect the interests of the developing countries like India. The major oil companies of the world—almost all of which are Western owned or controlled—have already intensified their exploration activities in the new oil rich regions of the world, particularly in Central Asia, close to India. Since some of the significant oil producing countries are in Asia, oil has become an important and strategic factor in the security calculations of the developed countries in Asia. The US-led war against Iraq is said to be heavily predicated on these considerations. For India, it is vital to ensure an environment in which stable and secure supplies of oil at market determined prices are available. At the same time, we do need to evolve a durable and predictable system of sourcing our oil requirements and consider long-term arrangements for this purpose, apart from building a strategic reserve in the country. We must also try and diversify our sourcing of oil and become parts of arrangements or consortia in new oil producing countries in Central and South-East Asia. The same is true of some other strategic raw materials for which we depend on imports. At the same time, we will have to hasten our domestic and international collaborative efforts for meeting our growing energy needs through non-oil and non-conventional sources of energy of which we have abundant supplies—solar, geo-thermal, wind, gas, atomic energy, coal and other as yet untapped sources of conventional and non-conventional energy. Energy is bound to occupy a major place in our strategic, security and economic calculations and should, therefore, be an area of concern and vulnerability.

A related issue concerns the security, safety and predictability of the sea lanes which carry our energy and other requirements. India's strategic location in the Indian Ocean makes it necessary for us to patrol and secure the sea lanes, on both our eastern and western flanks. Indeed, the great thinker K.M. Panniker had visualised this role for India in his treatise on *India and the Indian Ocean*. There is no other country which can ensure the safety and freedom of the sea lanes and it is for this reason that in the new emerging security architecture India has a vital role to play in ensuring the safety and freedom of the sea lanes in the Indian Ocean from the Straits of Malacca to the Gulf and the entire Indian Ocean. India has developed excellent capabilities and cooperative arrangements with the major powers of the world who have a presence in the Indian Ocean. India's own economic zone and over 9,000 km of coast lines and island territories require India to redouble her naval and Coast Guard security arrangements, apart from ensuring free and safe sea lane passage for our commerce and vital energy requirements passing through these sea lanes. The security and reliability of assured transport and communications links is an integral part of the security of nations. India is fortunate in that it has its own communications satellites and a highly sophisticated internal communications network. The same is true, to a lesser extent, of our shipping and air links. In a rapidly integrating globalised world, it is not possible for any nation to be totally self-sufficient in terms of international and supra-national transport and

communications links. What is important is to ensure that in all eventualities, our minimum strategic requirements are met through an infrastructure on which we can depend and over which we have substantial control. Here again, forging of partnerships and mutually beneficial networking is crucial.

The German economist, Professor Dr Klaus Gretschmann, in a speech in New Delhi in 1999, had predicted that the present century will be the century of knowledge or the "knowledge era". In a sense, this is going to be a century of knowledge revolution with significant breakthroughs in some frontier areas. Having missed the industrial and technological revolutions, India is fortunate to be well equipped to participate in, and profit from, the high-tech revolution. We are already one of the world leaders in IT and are well poised to make a significant contribution in areas such as biotechnology, oceanography, space and peaceful uses of nuclear energy. The relevance of this, in the context of our overall economic security, lies in the fact that our knowledge power will enable us to play a leadership role in which India's own pivotal contribution will help forge partnerships and develop a common stake for all in peace and stability. If India has to become a world knowledge power, we will have to reassess and reevaluate our rather narrow and short-term approach to issues like Intellectual Property Rights (IPR) and patents. Arguably, in the long run, it is countries like India that have the maximum to gain from a well defined and equitable global IPR regime. The Indian IT, biotech and pharma R&D are of a very high level and India could become the world's premier R&D centre in some of these cutting edge areas. The Reddy Labs and companies like Ranbaxy are already world leaders. Their R&D excellence, among others, will create conditions for the economic prosperity of India. Briefly, in the knowledge era, India's greatest assets could be said to be our highly qualified and abundant human resource and intellectual base. The fact that in today's globalised world, they operate without boundaries could become a significant factor in our long-term well-being and assurance.

Although India is not yet a significant recipient of Foreign Direct Investment (FDI)–over the past three years, we have received around US$ 3 billion per annum in FDI–India is considered to be a promising potential destination for global transfer of capital. Foreign investments, along with trade and technology, are powerful factors in promoting peace and stability. China, which receives a major chunk of foreign capital flows and which is a major trading nation, has been successfully able to use her economic muscle and potential to blunt the propensity of other forces to cause her discomfiture. It is argued that China's vast economic attractiveness has kept her often uncomfortable relations with the United States in check. Economics, thus, creates a formidable basis for mitigating political or military frictions. It has been suggested that had India had large foreign investments and trade, the external political pressures on India would have been much more manageable. The political fall-out after Pokhran-II, conceivably, would have been much more measured and restrained had India been a major economic entity with large foreign investments and international trade. In other words, trade, investments and technology are factors in the political and strategic calculations of nations. Technology tie-ups, joint ventures and third country ventures also have a similar benign effect.

After 11 September 2001, the phenomenon of terrorism has brought realisation that no country is immune from global terrorism which has its roots in endemic poverty, social tensions, religious fanaticism and narrow loyalties. The willingness of some state and non-state players to use terrorism to meet their political objectives has only compounded the problem. Transnational crime which hitherto was seen in the prism of drugs and narcotics, money laundering, piracy and other economic crimes, today has a deep nexus with terrorism and has in fact become a part of it. The global war against terrorism launched after 11 September 2001 has to become universal if the menace of terrorism is to be combatted. It is no longer possible to regard one man's terrorist as another man's freedom fighter! The war against terrorism will have to be fought on all fronts and no political exigencies or short-term convergence allowed to render it ineffective. The West's agenda and priorities are obviously at variance with ours: if the security of all nations is to be protected equally, it will have to be ensured that the concerns of countries like India are also kept in focus. Happily, there is an acute realisation that the evil of terrorism is global and all countries are its potential victims. India has been cooperating with other countries to combat terrorism and transnational crime. We will have to further intensify our efforts as foreign sponsored terrorism and transnational crimes are challenges which the Indian polity and state will have to face for long and fight, if necessary, alone.

In the past few years, India has understood the imperatives of a globalised world and has begun to evolve strategic and sectoral economic partnerships to further her economic security in a rapidly evolving international scene. Such issue based and selective cooperation is an integral

element of our international economic policy. Today, it is fair to conclude that economics has become a significant agent of political and strategic security. Good economics is also seen to be good politics. The benign effects of economic partnerships, networking and linkages are bound to have a beneficial effect on international peace and stability. The more the world gets intermeshed and integrated, the better it will be for all. In the immediate context of India, it is important for us to create such mutually beneficial intermeshing arrangements with our neighbours in South Asia, South-East Asia, the Gulf, Central Asia and with our traditional partners in Europe, North America, Russia, Japan and China. Happily, we are moving in that direction: strategic partnerships with our neighbours and others are being forged. With China, our trade has already reached the US $ 3 billion mark and the prognosis for the future appears to be good. There is talk about a possible trilateral cooperation arrangement involving China, Russia and India. This augurs well though it must provide us additionality and be independent of our mutually beneficial relations with other partners. The best insurance for India against vulnerabilities and vicissitudes lies in rapid growth and development through partnerships in trade, investments, joint ventures, technology, tourism and services. If India's GDP can grow by 10 per cent per annum and our share of global trade and investments can grow to 10 per cent of world trade and investment flows, our economic security will stand automatically enhanced. In a rapidly globalising and integrating world, no country can remain an island of insularity. We must seek and optimise our opportunities as a player in the international market place. Countries like Russia and China have decided to seek fulfillment within the constraints of a world economic order in which they may not have a major voice. In today's context, the security of all nations is interlinked and interdependent. India too will have to work within the reality and constraints of this flawed order; but our hope lies in what Swaminathan S. Anklesaria Aiyar believes to be the best opportunity for the developing countries whose growth and development is indispensable and is inextricably linked to the well-being and prosperity of the developed countries.

Discussants

Shri Chudamani Ratnam

We have had two very good papers which to a considerable extent supplement each other. There is unavoidably a certain amount of overlap, but if this is temporarily overlooked one could say that Shri A.N. Ram has concentrated more on the external aspects of the problem while Shri A.K. Ghosh dwells on the domestic issues. However, the domestic issues have a pointer to the external ones.

To start with, some of the yardsticks used in various analyses need to be qualified. Poverty is officially defined as having a nutrition of less than about 2,000 calories per day which does not even provide for a glass of milk or equivalent for every growing child. According to the standards of the developed countries, 90 per cent of the Indian population is below the poverty line. There are better definitions available for poverty. The other yardstick is literacy which is officially defined as being able to write one's name in one's mother tongue. A better measure would be "functional literacy" which would classify 90 per cent of the population as being illiterate. Furthermore, literacy needs to be backed up by literature. There is no point in being literate if there is nothing to read.

India is a large enough country to be considered a "mini-globe" in itself. When looking at the success of the South-East Asian tigers, people often wonder whether we would be better off if we were to consist of a number of independent smaller countries. Nevertheless, there is an instinctive gut feeling which cannot be countered that we would be better off as a united country and as has been said in a different context, "Either we hang together or surely we will hang separately". But, at the end of the day, we have to examine how succesful we have been as a "mini-globe"?

The biggest threat to our integrity comes from domestic economic issues. The richest states, comprising one-third of the population, have a per capita GDP nearly four times that of the poorest states, comprising 40 per cent of the population, which unfortunately is geographically concentrated in the so-called Hindi-speaking belt and the economic data suggests that the latter are functioning almost as a colony of the former. This situation has come about in the last 50 years or so. This is not what a mini-globe should be and is definitely a recipe for disaster.

If we can remedy this situation and thereby learn some hard economic lessons we can then hopefully benefit from globalisation. Otherwise, we will be back to the colonial days. At the same time, this should not be taken as an argument against globalisation as it could lead to a do-nothing attitude which would be even more dangerous.

I hope that some of these aspects will be examined in the later sessions.

Dr Rahul Mukherji

The two papers in this session covered the internal and external economic dimensions of India's national security. Shri A.K. Ghosh stressed the need for growth, human development, governance, infrastructure, and agricultural development, emphasising the need for human development for making a nation secure. Mr A.N. Ram highlighted the problem of market access in a globalising world. He put due emphasis on the challenges and opportunities arising as a result of growing economic interdependence, and the need to overcome the challenges by seizing the opportunities. Access to regions and their trade was the key for India's security. Energy security, open sea lanes, and opportunities arising out of the information and biotechnology revolutions were significant. I discuss these two papers in that order, highlighting and sometimes building upon the important ground covered by the authors.

To Mr Ghosh's checklist of points, I would like to add the threat posed by growing inter-state disparities beyond 1991. Inter-state disparities may pose a problem for India's national integration. Data shows that states grew more similarly in the pre-liberalisation than in the post-liberalisation period. With liberalisation, each state is more dependent on its own good governance for its upkeep. This helps to attract World Bank and other foreign and domestic investments. As a result, the disparities in growth rates between progressive (e.g. Gujarat) and backward states (e.g. Bihar) are ever widening.

The most prosperous states contribute taxes. They may begin to question the rationale of the rich financing the poor laggards who show no signs of recovery. Or will the high growth centres inspire the slow growing states?

Second, the point made by Mr Ghosh about the problem of fiscal deficit needs explication in terms of its impact on national security. The trade deficit is the summation of the savings, investment gap and the budget deficit. If the budget deficit is too large and the country is unable to mobilise internal or external savings to finance this gap, then this may lead to a balance of payments crisis. One cannot easily forget how easily India weathered the two oil shocks when its fiscal house was in order. In 1991, when its fiscal situation was in a mess, a relatively minor exogenous shock in the form of a rise in oil prices due to the Gulf War, led to a serious balance of payments problem. Such crises typically render the policy-makers subservient to the International Monetary Fund's conditionality.

The need for technological progress mentioned by Mr Ghosh needs reiteration. Trade economists like Paul Krugman have argued convincingly about how the US wage rate is ultimately related to the level of US productivity. Between 1974 and 1995, when the US was suffering the declining giant syndrome, its productivity only rose by 1.4 per cent per annum. The same figure jumped to 2.5 per cent per annum between 1995 and 2000, spearheaded by the falling prices of semiconductors and the Internet. This was also the time when the US became more self-confident with respect to its competitors like Japan. India needs to become a more productive economy by encouraging competition, promoting research and development, and through the provision of quality human and physical infrastructure.

The external factors affecting India's economic security are extremely vital. India needs to do a much better job of strengthening the multilateral trading system. One often hears from the Commerce Ministry what India cannot do in trade. Rarely does one get to hear what India can give to strengthen the multilateral system. Working with a region or with regions and trying to gain market access is a good policy. But one also needs to be aware that when a small and a big trader enters trade, it is always the small, trader who is more vulnerable than the big one. If India withdrew its markets for US products, the US would hardly be affected. If the US, on the other hand, closed its markets to Indian software and service exports, India would have a problem exporting these services. The US alone consumes more than 50 per cent of India's exports in this area.

Hitler followed a policy of making Germany's neighbours dependent by selling German products below world market prices, and by consuming their products above world market prices. Germany's neighbours were completely dependent on it on the eve of World War II. Hitler could pursue a policy of dependence by promoting bilateral rather than multilateral trade.

If the world moves from the bilateral or regional to the multilateral level, weak traders like India will be empowered by rules. Rules check unilateralism. Rules, however unfair, are good for all. This checks the easy use of *ad hoc* measures to satisfy some protectionist lobby in the trading country with a large market. It is well known that rules governing the World Trade Organisation and the Dispute Settlement mechanism have checked unilateralism and parochialism in trade. Non-discrimination and the most favoured nation rules are very important. They provide the architecture of the trading world. They reduce the costs of negotiating numerous agreements based on considerations of trade-weight. At a time when India is in no significant region, it must bring all its weight to bear in order to strengthen the multilateral system.

Second, India needs better infrastructure for the creation of policy relevant knowledge in trade. This involves the interdisciplinary study of politics, law and economics. At present, knowledge generation in economics is relatively better developed than in political economy. The study of trade policy needs to add elements of politics and legal analysis. A country may have an economic first best strategy but only the third best economic strategy may be politically feasible. Our institutions dedicated to the study of International Relations must stress International Political Economy as much as security. International Political Economy must gain a stature in International Relations similar to the status of International Trade in Economics. International Political Economy must evolve as a rigorous discipline and move beyond mere historical description to the evolution and testing of significant propositions that govern behaviour in the world of political economy.

India has suffered as a result of the lack of policy relevant knowledge in trade. To give one example, when the group of developing countries had come apart in the Uruguay Round, India was still looking for partners. The result was the ire of the developed world with no sympathy from the developing world. Second, India has been vociferous in its demand for special and differential (S&D) treatment. The demand was exploited by rich countries to divide the developing world. The demand for S&D may have helped rich countries to keep agriculture and textiles trade outside the purview of the GATT. Third, in the negotiations regarding intellectual property rights within the WTO, India sought a high moral ground and did not negotiate effectively. It finally acquiesced to an agreement inspired by the US pharmaceutical industry. Had India participated in the negotiations, it may have got a much better deal.

India may need a restructuring of institutions if it has to become an important trader. Australia found that Foreign Affairs and Trade should be in the same Ministry rather than in separate ones. Trade needed a heavy dose of foreign affairs for its promotion. And, the Industry Ministry with its important domestic constituencies blocked the way for Australian trade. Australia resolved the problem by taking out Industry from Commerce and restructuring a new Department of Foreign Affairs and Trade. India's Commerce Ministry seems to be faced with problems faced by Australia's Trade and Industry Ministry in yesteryears. Commerce's view is almost always less liberal than that of Foreign Affairs', and, it seems to be pulled by the weight of the uncompetitive domestic lobbies. Will Indian policy benefit from a better institutional alignment of Foreign Affairs and Trade?

General Discussion

Chairman

I think we had a very comprehensive coverage of both internal and external challenges and very thought-provoking remarks by the two discussants. We now throw the subject open to the house for any comments and questions.

Ambassador S.K. Bhutani

Just two factual comments on what Rahul Mukherji said regarding the Department of Foreign Affairs and Trade in Australia. The Department assessed the trade and investment opportunities with India, on the one hand, and, on the other, started selling fighter aircraft to Pakistan in 1990. So it does not mean that if the two Departments are under one Minister, they will act in a coordinated fashion. The second point is about the Uruguay Round of negotiations. You were referring to the Group of Eight which was constituted with India, Egypt, Brazil, Mexico, etc. I was in Egypt at that time and I was asked to present the Indian case. It took me an hour to present to my counterpart in the Foreign Ministry and he very candidly said that this is all fine, but when it comes to the crunch, we look after our national interests. And the pity is that we did not.

Wing Commander Amar Zutsi

The first point is for Mr Ghosh. He mentioned that China puts more emphasis on economic development as compared to strategic or military development.

In the late 1960s, China developed Inter-Continental Ballistic Missiles (ICBMs) and nuclear weapons that gave her security.

The second point is for Mr Ram. Countries like China and Russia have huge potential markets for India's economy. But I am afraid, China considers India a rival and till the new government there changes policy, there is not much hope. Also, we should exploit our strategic relations with countries in the Central Asian region and the Middle East.

Shri A.K. Ghosh

I made two references to China, one as to how relevant is economic growth for ameliorating the conditions regarding poor health.In China's example, I quoted Sen's and Dreze's comment from their book *Hunger and Public Action* where it brought out that radical transformation in the health and nutritional status of the Chinese population took place before the reforms of 1979, at a time of relatively moderate growth of its GNP, but enormously effective public involvement in the improvement of living conditions. And in the post-reform period of China, when it grew much faster, it has seen impressive acceleration in the growth of GNP and in private incomes but also a crisis of public provision, especially of health services, and increase in mortality. Thereby, making the point that those economies which are emphasising that high economic growth will bring about better health, education and removal of poverty may be missing this important point based on actual experience. The same kind of experiences are there from the East Asian countries.

Secondly, I mentioned about China in the context of Dr Abid Hussain's famous USI National Security Lecture of 1993, when he mentioned that China had a grand strategy to have high economic development and to take care of military power subsequently. That means giving less in percentage of GDP to military expenditure, and more to economic growth. I said in that context that the 25 years period which he talked of having this grand strategy is not available to India

Chairman

I want to slightly modify Mr Ghosh's point. China had a grand strategy.The basic point made by Dr Abid Hussian is very correct. But the strategy was not necessarily economic development first and military development

subsequently. It was in three phases. The initial stage was military development, with emphasis on creating the type of strategic capability which will give it a position in the world security environment. It was development in the nuclear and missile fields, which is really a military development and not an economic development. This was followed by strong economic development and then reorganising the military. The basic point made by Dr Abid Hussain was that before attending to the military capability *per se*, the Chinese had made economic development their focal point. But, side by side, they made sure that they developed nuclear and missile capability which would give them a place and position in the world's security environment.

Her Excellency Ms Penny Wensley, Australian High Commissioner to India

I want to compliment all the presenters as the papers were very persuasive, very compelling and they are amongst the most refreshing analyses on the subject I have heard in the year I have been in India. I was very disappointed at the omission, in Ambassador A.N. Ram's presentation, of any reference to Australia, when talking about the importance of ASEAN and the Asia-Pacific region to India. It actually obscures the reality about the opportunities between Australia and India and I think it should be a part of the landscape that you are developing for India and for strengthening economic role and influence in the world. Australia is the strongest growing economy of all the Oraganisation for Economic and Cooperative Development (OECD) economies. We have pursued an economic reform programme simlar to what Mr Ghosh mentioned. There is a natural partnership and convergence between Australia and India which is under-exploited and needs to be seized on. We are the 11th largest investor in India, with over a billion dollars worth of the eight billion that you talked about. We are natural partners in the Indian Ocean region, including in the provision of secure and stable energy supplies. Australia has signed a $25 billion, 25-year programme to supply natural gas to China. The reason we won that—and it was a fiercely competitive process—was precisely because we offered a stable and secure energy source. And someone said, "Oh the new supplies and discoveries are going to rule out Australian natural gas". I commented that your energy demands are so extraordinarily large that there is room for everyone.

India and Australia, in the globalising world, should be working closely on issues of trade and trade competitiveness as partners. I would like to see India join the "Cairns Group" (a well known informal group of agricultural producing nations, of which India is not a member) and I would like to see India in the APEC, because I think we are natural partners towards becoming agricultural producers and exporters.

Commander Prem Batra

It was under democracy and socialism that we had an incompetent private sector and a lazy public sector that grew. We are yet to find a way of restructuring under intense WTO competition. Another point that was alluded to by both speakers was regarding GDP growth vis-a-vis China and Russia. Which model should we follow? China, before starting economic reforms, under the socialistic pattern, had basic necessities like food, clothing, shelter and education for everybody. We do not have that. Currently the Chinese have the highest growth rate. After the break-up of the Soviet Union, as per newspaper reports, the Russians used to go to nearby forests to pick mushrooms to eat. Now, their rate of growth is around 9.5 per cent. Which model should we adopt? There is no answer to these questions. The important points are productivity and quality. Only these two things can give us surplus to remove poverty and the capability to build infrastructure.

Brigadier Narendra Singh

The first point is for Mr Ghosh. None of our political parties has population control forming part of its manifesto. This is our biggest problem and must be reiterated in all forums. Second, Mr Ghosh mentioned about agricultural production. Proper marketing of agricultural produce is very important. You would be surprised to know that in one district, the price of onions and potatoes is very high and in the others, the farmers are ploughing these back into the land.

My next point is for the Chairman who covered the aspect of Chinese spending on the military vis-a-vis economic development. It is a well known fact that the Chinese decreased their Armed Forces' manpower by 30 per cent, but they kept the same budget which they utilised on more useful items like ICBMs and others. So they did not decrease the military spending, but spent it wisely.

Shri Ramesh Shukla

I wish I could share the optimism of Mr A.N. Ram on India and TRIPS(Trade Related Aspects of Intellectual Property Rights). What gives substance to your optimism that India would do well, knowing that our expenditure on R&D is very limited, at least as compared to the US and European countries? There are other difficulties also. Knowledge creation, of course, is going to play an important role in the future, as it has played in the past. If India has failed in the past it was because we were not a knowledge society. Please substantiate your optimism.

Commander Radhakrishnan

Reference was made to gender inequality impeding development.This has been underplayed, particularly so when the level of education is deplorably low in most parts of the BIMARU (Bihar, Madhya Pradesh, Rajasthan and UP) states. Unless we bring female education to a better level, probably the population policy is not going to succeed.

A reference was made to an overblown bureaucracy and increase in salaries. One of the recommendations of the Fifth Pay Commission was to reduce the strength of the bureaucracy by 30 per cent. This has not happened. It is a drain on public funds. Why are we not able to reduce the strength of the bureaucracy?

Dr Raj Kumar

The speakers have covered the quantitative aspect but not the qualitative one. The sum total of all our policy and planning should be happiness, which the world has lost. So what I would request from the two speakers is to do some sort of qualitative assessment of the problem to enable us to get a holistic view of the issues.

Chairman

I want to interrupt here. I think we are going too fast and trying to cover everything in this session. We have two more sessions and the crystallised thoughts would come by the time we come to the end of the seminar. At this stage, I would request the two speakers to answer only the relevant issues raised by the audience.

Shri A.K. Ghosh

The point made about the importance of increase in productivity leading to surplus, preferably of good quality products, I have absolutely no quarrel with that. How you generate the surplus and the technological advances is the important issue. What I have tried to do very consciously in my paper, is not to talk in general terms about technological progress. I have tried to talk of technological progress in specific spheres, because these need attention from the removal of poverty point of view and increasing food security. I talked of agricultural research for dry-land agriculture, watershed management, crops which are eaten by the poor, where a new kind of research is required. I also talked of the limited amount that is now put in as a percentage of the GDP in agricultural research which needs to be augmented. I am talking of specific areas for research which need attention, because national and food security is the main concern. The Green Revolution has done its wonders. That is why we are sitting on a surplus of 65 million tonnes of food. But productivity must increase and technology must have its way. However, technology has become a commodity and can be purchased. What is important is the managerial revolution.Attention needs to be paid to the process management.

The second point is about population control. I had not given adequate emphasis for two reasons. First, as per the statistics, the population growth rate is coming down overall. Second, there are states within India which have done extremely well and this can be emulated by other states. What Tamil Nadu and Kerala have done and Andhra Pradesh is going to do is already well known. We should rather learn from each other. And that will help in removal of illiteracy, in improving female education, and giving them equal rights.

Shri A.N. Ram

Regarding trade between India and China, I would merely like to support the argument made by me with figures.Our trade with China was resumed in the 1990s and in a short period of eight or ten years, it has grown to a level of over US $ 3 billion. Obviously, there are complementalities, otherwise, the trade would never have grown that much. The second point was about Pakistan's economic compulsions in relation to SAARC. I would like to just assume that Pakistan is not willing to come on board. Indeed, this is true. We must treat Pakistan as irrelevant till Pakistan comes on board. We cannot wait for Pakistan to change. Obviously, SAARC cannot wait indefinitely. That is the crux of the problem, which the heads of the states and governments in SAARC will have to discuss when they meet in Islamabad early next year, in 2003.

The third point is a very valid one and I owe an apology. Madame High Commissioner, you are absolutely right, that in our international economic literature, Australia has not figured at all. And the fault really is that of India scholars and the fact that sufficient awareness has not been created about the partnership. We are indeed natural partners. Australia is home to not only the richest part of the Asia-Pacific region, resource-wise, technology-wise, human resource-wise, but also you are a member of the larger ASEAN and ARF family to which India also belongs. We have had some vicissitudes, let us be honest about it, we have had some problems politically, but these should not be allowed to come in the way. On my side, I would like to rectify the lacunae in my presentation, but I sincerely hope that your message would reach across to many more people, because Australia must figure as a part of our international economic charter.

The fourth point was a question about which model India should pursue, China's or Russia's. I believe India should pursue the Indian model. We have an Indian model which has been successful in terms of growth as well addressing our socio-economic problems. I do not think that there is choice. But China and Russia are a part of that triangle which I submit to you will play a huge role in the coming years for providing India economic security.

The question about the TRIPS agreement. I am aware of the difficulties you have in mind. The TRIPS agreement is far from satisfactory. It is a flawed and partial agreement. But if you look at the totality of the intellectual property rights issues, you will find that in nine out of ten areas, India is in over-compliance with international regulations. Take copyrights, we are substantially in compliance. If we look a little into the future, then India's natural advantage lies in India's knowledge power. It is that knowledge power that we must seek to draw capital from. This can be done if we selectively use the TRIPS agreement when it comes up for review in 2005 to make sure that our interests are well safeguarded. As it happens, on the ground, there is a lot of work which remains to be done in India itself to implement the TRIPS agreement and its companion, the TRIMS (Trade Related Investment Measures) agreement. But I see a great deal of possibilities for India in the knowledge industry.

Two more issues. One is about the bureaucracy. A number of speakers have alluded to that. I belong to this tribe. I sincerely believe that the biggest impediment to progress and growth in India is our bureaucracy. Yet, you cannot do away with the bureaucracy. Therefore, let us discuss, in another seminar, how to reduce the role of the government. We breathe, sleep, and eat government. We are over-governed, for God's sake, let us free ourselves from these shackles, because if our energies are unleashed, may be one day we will become a society where creativity is the order of the day, rather than the impediments which the bureaucracy imposes on us.

Lastly, the question on quality rather than quantity. There is one head of state in the Indian subcontinent who measures his country's progress in terms of Gross National Happiness (GNH) and that is the King of Bhutan. If you talk to him, he says, "I am not interested in Gross National or Domestic Product or per capita income. All I want to know is, has my GNH gone up or not". He measures with a different yardstick. Bhutan's per capita income today is in excess of US $600, which is the highest in South Asia, because it pursues pragmatic policies of cooperation with India. When the Chukka II or the Tala Hydro Electric project comes on stream, in about five years time, Bhutan's per capita income would reach US $ 1,000.When some of the other projects which are being developed with cooperation with India come on board in 2025, Bhutan will have reached the income levels of South Korea. These are the success stories that we must tell our neighbours, Nepal particularly, Bangladesh, Sri Lanka and others. There is much scope for bettering the quality of the lives of our neighbours as well, apart from ourselves.

Chairman's Concluding Remarks

I would round off by emphasising a few comments and points. First of all, I think it needs to be understood, that as far a security is concerned, great nations are made by a combination of three factors. These are:

(a) **Economic Prosperity of People.** This is a fundamental requirement.

(b) **Sustained Growth.** This must be understood, because the future lies with sustained growth. It is not a question of overnight growth for a few years, you get economic prosperity and then start declining, which often happens in Asia.

(c) **Economic Ability to Sustain and Maintain Military Security**. For a large country like India, alternatives to military means for security are not a viable option. Really speaking, you have to maintain your military security. Military security basically requires strong economic backing. And that is why I have put military security as the third element in the order,which is essential for achieving greatness and ensuring security.

If this is remembered, many things that have been said today fall in place. When talking about external and internal challenges, the two areas have been comprehensively covered. But on the external side, I would like to add a point or two. The point has been made about globalisation, oil security, critical raw materials, non-tariff barriers, trading laws and things of that nature. One needs to remember that in the globalised world, the way things are developing, particularly with the rise of the Asia-Pacific region over the last decade, the Western democracies, which are the developed nations, are feeling threatened. In order to maintain their preeminent positions in the political and economic sphere, they would try a variety of means to defend their developed status, which would automatically undermine the ability of the developing countries to come up and rise. This is an important factor and that is why non-tariff barriers and various kinds of other restrictive regimes are being tried in both the political and economic areas. It is, therefore, incumbent upon us to make sure that we understand this phenomenon and devise ways and means of facing this serious challenge. This also extends very importantly to the technology denial field. They would deny you advanced technologies in various areas if they think you can catch up with them, apart from the nuclear issue which is quite a different thing.

On the internal side, our major problem today is governance and economic management. When you talk of economic management, it is a very wide term and education and health are a part of this economic management. There are a lots of other things, like growth rates, fiscal and monetary policies, labour and employment policies, expenditure management, technology development, and so on. If economic management is done correctly, we would overcome the basic trauma of low growth rates and spreading of prosperity among the people. Much of our problem is in the manner in which we inflict losses on our economy. A few years ago, I did a study and realised that other than subsidies, the yearly sum total of losses in the Indian system to include the public sector, State Electricity Board (SEB) losses, Delhi Transport Corporation (DTC) losses, Delhi Electric Supply Undertaking (DESU) losses, and so on, was of the order of Rs 1,50,000 crore a year. Mr K.C. Pant, the Deputy Chairman of the Planning Commission, agreed with these figures when they were quoted by me. He outlined a number of things that they were going to do to overcome this problem. This is the kind of waste that is a part of our system.When we talk about allotting funds for education or defence, the difficulties are there, because we are unable to control the losses and these are not subsidies, but losses in the system. So these are points that have to be remembered when we talk of proper economic management. If we get our economic management going correctly, then we can overcome the problem.

Finally, one point which has not been talked about and which needs to be kept in mind (how it got missed, I really do not know!) is what I call ecologically sustainable economic development. That is one of the biggest challenges that we face today and will do so in the future as well. If you do not and cannot look after your ecology, then your economic development will suffer seriously in the years to come.

CHARACTERISTICS OF THE INDIAN ECONOMY AND ITS VULNERABILITIES IN THE CONTEXT OF GLOBALISATION

SECOND SESSION

Chairman	:	Vice Admiral K.K. Nayyar, PVSM, AVSM (Retd.)
First Paper	:	Vice Admiral Raman Puri, PVSM, AVSM, VSM
Second Paper	:	Shri M. Guruswamy (paper presented by Captain S. Samaddar, Indian Navy)
Discussants	:	Mrs Sudha Rao Air Vice Marshal Viney Kapila, AVSM, VrC (Retd.)

Chairman's Remarks

Vice Admiral K.K. Nayyar, PVSM, AVSM (Retd.)

We deal this afternoon with the "Characteristics of the Indian Economy and its Vulnerabilities". I am not going to rush through a book of economics, but I will tell you what I feel are the characteristics of the portions of the economy which impact upon a person, and we may say that there are possibilities in a globalised economy, and where there are vulnerabilities. Mr A.N. Ram, in the morning session, had made a very important point that we should not be looking at the negative points only, because globalisation offers us many areas of opportunities. Which are the two or three characteristics of an economy which affect not only the ordinary person but the entire society? First and foremost is the capability of an economy to feed, that is the agricultural sector. It is an assured sector. We are very comfortable in it. Twenty years ago, Babu Jagjivan Ram, in one of the lectures in a service institution had said that effortlessly, with the existing technology, we can push agricultural production to 400 million tonnes per annum. It could be done, but we did not have the markets. Now that we have the markets, there are some other issues which have come up.

Secondly, India is no longer the *sone ki chirya* (golden bird). We are, relatively, modestly endowed with natural resources, and, therefore, we have to work harder to be able to import and manage resources like energy.

Thirdly, we are grievously short of infrastructure. Though there is a stock of wheat, in the last 16 days there has been no rolling stock to move it to the ports for shipment. That is an area to worry about.

Areas which we should be happy about and which were mentioned in the previous session need to be reiterated. Our assets are brain power and knowledge of the English language. Indians are doing well in computer software. Knowledge of the English language is of great help for e-commerce. Another emerging field is that of biotechnology. In the USA, there are more Indians or people of Indian origin in the biotechnological laboratories than in the field of computer software. The new emerging technologies are our strengths which should be exploited to our advantage.

Second Session: First Paper

Vice Admiral Raman Puri, PVSM, AVSM, VSM

INTRODUCTION

At the outset, let me first of all, state that it is a rare honour and privilege for me to have been invited here amongst this august gathering to discuss the topic, which has been the talking point for economists, intellectuals, financial wizards, financial law-makers, industrialists, etc. I really wonder that as Commander-in-Chief of an operational Naval Command, how I am to make judgements on issues which are deeply rooted in economics. Notwithstanding this handicap, I would like to express my views as seen through my prism and I can assure you that it is not coloured.

For simplicity, I have divided my talk under the following heads:

(a) Introduction.
(b) Definition.
(c) The Indian economy: backdrop.
(d) The course correction.
(e) Vulnerability indicators.
(f) How much globalised are we?
(g) Way ahead.
(h) Conclusion.

To understand some of the responses to globalisation, it is important to define the term. Globalisation, evaluated critically in a positive mould, includes liberalisation, privatisation, acceleration of growth rates, foreign exchange flows, export growth, drastic reduction in import restrictions, foreign direct investment and capital account convertibility, to name a few of the many cogs of this wheel. To make it simple, it is a process through which there is supposed to be an increasingly free flow of ideas, people, goods, services and capital, which leads to the integration of economies and societies.

THE INDIAN ECONOMY: BACKDROP

After having defined the term globalisation, it will be in order to take you to the formative years of our economy. The Indian economy, as many of us are aware, was largely agricultural during the pre-Independence era, and was stagnant. There was considerable fluctuation in the living conditions due to famines and epidemics. Whereas the economy during the 1990s demonstrated rapid recovery from a deep crisis and a dramatic upward shift in expectations of levels of growth, and greater resilience to withstand shocks, the task of tackling poverty and misery remained a significant problem. The following milestones were achieved in the ensuing years since Independence:

(a) At the beginning of the last millennium, 94 per cent of Indians could neither read nor write. And at Independence, the figure was 85 per cent. After Independence, the country embarked on an ambitious task of planned economic growth to move the country out of stagnation. Nehruvian policies saw India achieving a growth rate of approximately 3.3 per cent, popularly known as the "Hindu Rate of Growth". Agriculture saw a boost at 2.5 per cent with post-Green Revolution showing an even higher growth rate of 3 per cent and, importantly, the sector became less dependent on the vagaries of the monsoon. The food stocks buffers were created to meet exigencies.

(b) Industry grew at an annual rate of 5.5 per cent. The industrial base expanded rapidly, thereby, laying the base for sustained growth. The services sector grew by about 6 per cent per annum and became a sizeable share in the GDP (Gross Domestic Product). Industry's share in GDP increased remarkably, making India the 10th largest industrial nation.

However, these achievements in economic indicators of growth did not indicate the overall scenario envisaged, and many of the goals we set out to achieve did not materialise. The following could probably summarise the disappointments:

(a) **Income**. The aim of doubling income got derailed by almost a decade.

(b) **Unemployment and Poverty**. The unemployment and poverty rate remains unacceptably high.

(c) **Education.** Till the early 1990s, 48 per cent of the people did not know how to read or write.

(d) **Health.** A quarter of our people do not have access to safe drinking water and as many as 87 per cent do not have any sanitation facility.

(e) **Balance of Payments.** India's exports that were about 2 per cent of world exports up to the 1950s, went below 0.5 per cent of world exports at the beginning of the 1990s, and are currently at 0.9 per cent.

In brief, although the performance of the economy was remarkable when compared with the earlier period, it was not adequate to meet the challenges and, more importantly, by the late 1980s, it was not conducive to continued accelerated growth. An important factor propelling growth during those days was the rapid rise in government expenditure, reflecting the fiscal deficit jumping from 4 per cent of GDP to 8.33 per cent in the early 1990s. Recourse was taken to external debt, often in commercial terms, and a large amount with short maturity. In some ways, the high growth in the 1980s can be attributed to external and internal debts.

THE COURSE CORRECTION

During the early 1990s, a severe economic crisis erupted that adversely affected the balance of payments scenario, and the precarious situation was accentuated by the Gulf crisis. This necessitated a shift in our economic policies. Industrial licensing was done away with, partially to bring in efficiency of markets. Extensive reforms were undertaken in the financial sector and a more effective system of regulation was put in place. The primary aim was to bring in more competition, both domestically and externally.

These measures showed remarkable results in the first few years and the GDP growth rate rose to 6.8 per cent. Fluctuation in GDP was minimised and the growth performance was maintained in the face of unprecedented political uncertainties, sanctions, border tensions, Asian crisis and steep increase in oil prices. The external debt ratio came down to 23.5 per cent from 40 per cent. However, the reform phase also saw another regime in the name of the World Trade Organisation (WTO) spreading its tentacles.

Nani Palkhivala, commending the metamorphosis, has commented, "The world's fifth largest democracy reached a turning point in history; for the first time it looked less like a tortoise and more like a tiger. The impression was that the arthritic economy started performing like an athletic economy."

VULNERABILITY INDICATORS

The policies enunciated in the early 1990s appear to have exhausted themselves; the Indian big business houses are divided over what direction to take and there are a number of apprehensions, as the vulnerability indicators would suggest. Each nation, as per its history, polity, and inherent cultural factors, is liable to a certain kind of reaction to such a process and India is no different from them.

Labour

The labour sector has got affected by liberalisation. Globalisation, through the agency of Transnational Corporations (TNCs), the World Bank, International Monetary Fund (IMF) and WTO, is driving the dilution of labour standards and the lowering of workers' rights. Globalisation inevitably leads to an assault on workers' rights. This, in the final analysis, is a critical factor for the economy. Here, I would like to cite the example of Malaysia. A certain MNC (Multinational Corporation) flourishing in Malaysia saw its interest threatened, when the Malaysian Parliament was in the process of passing certain legislatures strengthening labour rights and conditions. The MNC threatened to walk out of the country, should the country pass such laws. The Malaysian Government had to finally bow to the pressures of this MNC. I would also like to mention that globalisation is affecting the organised labour sector. However, neither the global players nor the government is worried about the unorganised labour sector. We need to take concrete steps to improve the conditions of the unorganised labour sector.

Food

As far as food is concerned, the vulnerabilities are linked to volatile prices, and instead of leading to a stable, secure, and cheap food system, globalisation is creating an unstable, insecure and costly food system which

has undermined the ecological security of agriculture, the livelihood security of farmers and the food security of both the poor and the rich. The elements of trade liberalisation policies that contribute to food insecurity, raising an alarm bell are:

(a) Undoing of land reforms and allowing concentration in land ownership.
(b) Privatising water.
(c) Introducing monopoly control on seeds through Intellectual Property Rights (IPRs).
(d) Diverting land from food to cash crops for export. Farmers in some of the African food surplus states switched over to the cultivation of cocoa. The states became deficit in food. The price of cocoa in world markets crashed. The plight of farmers became pitiable.
(e) Diverting food from local markets to global markets.

National Security and Technology

Globalisation of the economy, of our telecommunication infrastructures, Internet and the print and electronic media networks has no doubt added to our economic strength but, at the same time, it has increased our national security vulnerabilities. Surprisingly, in the formulation of policies relating to globalisation, national security implications have been given very little attention. One should take lessons from China on this issue. China has clearly identified sensitive sectors with national security implications such as telecommunications, defence and high technology industries, print and electronic media, etc and has been fiercely resisting Western pressure to open up these sectors to foreign participation. France has also been doing so for many years. We seem to be opening up these sectors without any regard to the impact on our national security.

The advanced nations have cordoned off technologies which have high end use and even denied civil technologies which have dual use. These advanced nations seek to perpetuate their geo-strategic dominance by locking their technology into closed cartels. These multilateral cartels act in concert to operate a triple cordon around their technologies. The first cordon denies their exports; when not denied, the second cordon renders these technologies undiffusable by restrictions on their end use by specified end users. When not restricted, the third cordon of IPR binding renders them unreplicable, even if affordable. This is applied even to civil technologies.

There are industries like steel, sugar, cement and even automobiles where the technologies are available with a large number of foreign companies. Such companies, to make money, are willing to sell these technologies. I would like to cite the example of the car companies where the foreign companies prefer to own the Indian companies 100 per cent. Most of these companies start as joint ventures but all of them eventually buy off the Indian partners. The recent example of Maruti selling its stake to Suzuki is a case in point. I feel that for such technologies we should not permit majority foreign equity as the technology required is available. High technological sectors for defence and civil use will not be available and will have a triple cordon around them. If we continue to indiscriminately import such technology, the Armed Forces and even the nation risk a triple trap situation wherein what is developed abroad will not suit our new requirements; what is suitable will be denied; what is not denied will be unaffordable. In many areas, the Armed Forces are already in such a situation. There is no escape from mounting a Science and Technology initiative coupled with Research, Development, Testing and Evaluation (RDT&E) effort in a 10 to 15-year perspective. My own experience is that where we display the will, we succeed. The reward is not just reliable availability but also an order of magnitude lower costs.

Non-Banking Financial Institutions

Globalisation has introduced an array of private banks, financial lenders and a boom in the stock market. It is but natural that opening up of markets will attract many players in the financial fields i.e. genuine entrepreneurs as well as money launderers. The collapse of stock markets in South-East Asia by the manipulation of the markets is a stark example of the culture of market mafias playing havoc in financial matters. In my opinion, these private banks and non-banking financial institutions are very vulnerable and we need to place effective regulatory mechanisms to protect the interests of investors.

Federalism

Being a strong believer in Indian federalism, I feel a little uneasy at the veiled threat to federalism in the context of globalisation. India's engagement

with the WTO has influenced its federal political system by multilateral policy parameters that had previously been a matter for domestic political negotiation between central and state governments. In addition to this direct impact, federalism has also been affected indirectly by the political incentives for state-level elites to view WTO-related matters through federal lenses.

The global structures have begun to penetrate local space without much mediation, either by way of protection or control from the state's centralised institutions of planning and bureaucracy. The result is that local politics has become a scene of conflict and collaboration with global economic structures as well as the institutions of the Indian State. In India, this situation was epitomised recently by a certain company winding up its operations in the face of farmers' agitation in the south and another acquiring a durable foothold in Punjab largely due to the cooperation it received from the farmers' lobby. Since enticing foreign capital becomes a means of generating growth, different regions of the country vie with one another to attract foreign capital. This may lead to separatist tendencies. Economic disparity in states because of resources may grow further, thus, leading to more inter-state conflict.

Polity

International capital is the driving force of globalisation. There is a movement of approximately $ 1 trillion every day across the globe and no government/country has control over it. The international capital aims at controlling not only the economic sector but also the entire political set-up. The ultimate aim seems to be to keep those opposing globalisation out of power, even if they have a majority. The global economy is opposing governments' attempts to check unemployment and poverty under the pretext of financial discipline and compelling governments to disinvest. Internal strife is being created to divert public attention from the harmful effects of globalisation. The Third World nations are facing the threat of colonisation sans direct political control.

By influencing the state machinery through consultancy, seminars and in many cases, funding parties and candidates, the globalisation process has ensured the hold of the economy over political prudence. By sponsoring R&D initiatives, a country's intellectual growth too can be controlled and monitored.

Corruption

Institutionalised corruption has increased enormously in the post-globalisation period in India. The corruption in procurement deals could be a fallout of globalisation. Knowing the poverty ratio in this country, more globalisation competition will give rise to allurements and that will finally dethrone the basic values, which still are a Preamble in our Constitution.

Supermarkets

Now we do not just have superpowers, we also have supermarkets. The supermarkets are the 25 largest global stock, bond, and currency markets in the world, from Mumbai to Shanghai to Wall Street to Paris to Frankfurt, which today have become increasingly autonomous geo-political actors. In some cases, they are equal to and, in many cases, superior to, nation-states. Their role in creating political instability in some countries is well documented. It was not a superpower but in fact the supermarkets that voted no confidence against one government recently and helped to trigger its downfall. One no longer needs a smart bomb for destruction. Supermarkets can destroy you by downgrading your bonds.

Culture

Globalisation is leading to cultural hegemony under the influence of the Pepsi-Coca-Cola culture. Such homogenisation of diverse cultures certainly makes humanity poorer. The MTV culture is going to stay and probably make a big dent on the cultural make-up of India. However, the proponents justify their arguments for the sake of universal values or human rights.

Poverty

The UNCTAD (United Nations Conference for Trade and Development) *Trade Development Report* clearly examines the wider inequalities among countries as well as among income groups within the countries which are closely associated with globalisation. Robert Wade of the London School of Economics, states, "Technological changes and financial liberalisation result in the disproportionately fast increase in the number of households

at the extreme rich end, without shrinking distribution at the poor end". In reality, globalisation, with its inevitable emphasis on exports, has resulted in free export of even basic necessities like food grains that have helped drive up the prices. The poor are adversely affected because the greater proportion of the consumption is done by the lower income groups, while the benefit of overall lower prices, if any, is accrued mainly to the relatively higher income groups. Physical economies in my view, are more important than fiscal economies practised from behind air conditioned spaces. *Bhandars* in the Indian overflow at one end, and fiscal economies on the other, do not permit their optimum utilisation.

HOW MUCH GLOBALISED ARE WE

The most common measure of globalisation is openness to trade, and a country's participation in trade. If we measure our share by these standards, the extent of India's globalisation is insignificant—it is one of the lowest in the world. In fact, India's share in world trade is a meagre 0.7 per cent or so.

Another commonly used measure of globalisation, as per the economists, is a country's participation in international capital flows, particularly Foreign Direct Investment (FDI). Annual flow of FDI across the globe is more than $ 1 trillion, i.e. $ 1,000 billion. Annual FDI inflow into India is $ 3 to 4 billion only, or 0.3 to 0.4 per cent of the world, whereas for a country like Vietnam the figure is 6 per cent of its GDP and for China it is 4 per cent of its GDP. The same is true of Foreign Institutional Investment (FII). Therefore, the first point that I would like to emphasise is that despite all the talk, we are nowhere close to being globalised in terms of any commonly used indicator of globalisation.

I do not have to convince anyone out here that liberalisation and privatisation have not brought the required prosperity for the majority of our people, or wealth for the country, or a technical and scientific revolution for the productive forces. The only thing which has happened abundantly is that probably the financiers and speculators of India and the world have been successful in sucking the wealth out of India for the last few years. Various adjustments to the economic policy have been made to preserve the core content of liberalisation and illusions created through the introduction of a variety of programmes. India is nowhere near receiving the investment that it needs to reach a higher growth plane, and the growth process has been highly uneven.

I would also like to state that I have often seen people quoting China's rapid progress in the era of globalisation. China, no doubt, has done an impressive turnaround in the fields of industry, agriculture, military and science and technology. However, before we try to take a cue from the Chinese experience, I would like to state that the tools available to China for implementing various policies are not available to us. Therefore, an introspection to evolve our own methods is necessary.

WAY AHEAD

The weakening of world economic growth, manifest in early 2001, but exacerbated by the 11 September 2001 attacks, has revealed the fragility of global economic prosperity. The need for the kind of high quality analysis that the IMF provides, helping to keep the global economy on an even keel, has become more evident. The ripple effects of action taken in one country tend to be far greater and to travel faster than ever before, and we have to be careful in a democratic polity, with very large levels of poverty, not to expose the country to risks merely on the basis of some theoretical financial economic postulations emanating from the globaliser's institutions.

The concept that change is revolutionary and not evolutionary is defining the world economy today. Territorial control alone is not enough to exercise control over an economy or economic factors. Countries may not use military force to persuade rivals. In the changing scenario, neo-colonialism and War By Other Means (WBOM) are the ways to go about this. This justifies the case of economic security of a nation and its importance in the globalised world.

Information technologies, the boon of our times, if used properly can lead to tremendous advantages for a nation, and if not properly monitored, can also cause economic problems. Governments and companies have to be aware of the economic and technological realities in the information age and develop appropriate mindsets and tools to deal with them.

If India's potential in the global economy is to be realised, several fundamental issues and concerns will have to be addressed. To steer the reform bandwagon safely away from the environment of contradictions and confusions, certain fundamentals need to be addressed:

(a) National consensus on broad issues of reforms and not merely by statements like "globalisation is inevitable" or " reforms are irreversible."

(b) By all standards, productivity in our country is low and for enhancing capabilities and skills of labour, illiteracy has to be fought. Subsequent to that, skill enhancement can be undertaken which is largely a neglected area in our country. Globalisation has not, and will not, help in this area.

(c) Development of infrastructure, both economic and social. Knowledge on the economic and technological revolutions to be disseminated to one in all.

(d) The emergence of economic security as a tool for national security needs to be emphasised.

(e) We must develop a diplomatic aura by which the desired results in international relations can be achieved through attraction rather than coercion.

(f) Networking with the Indian diaspora in the industry around the globe can ensure a free flow of technology and capital to our country.

(g) We must build a good infrastructure to exploit the revolution in technology.

(h) Free flow of capital without any regulation has to be guarded against. At the same time, caution has to be observed for the unregulated opening up of the capital account.

(i) Protection of intellectual property rights in knowledge-based products through patents, copyrights or trademarks must become a national priority, especially in today's market-based global economy.

(j) The government must strike a balance between globalisation and localisation and the pace of trade liberalisation to ensure social security needs, job security, health care and safety of the population.

(k) Good economics needs good governance. There are great deficiencies in the working of the three branches of the state, namely, the legislature, judiciary and executive, which need to be streamlined by passing bold laws. In the meantime, this really needs to be factored in any position we take on globalisation.

CONCLUSION

Though globalisation offers opportunities, the risks of an open economy are also well documented. While not suggesting that we miss these opportunities, we need to consider our own governing structure and specific needs when taking decisions.

Some of the issues that need to be reiterated are:

(a) We need to be careful when using technology as an argument for globalisation and allowing majority entry for hundred per cent stakes. There are three levels at which we can allow people to come in.

(b) The high technology which is dual use in nature and for the areas which we most require as far as national security is concerned, there is no short cut but to go the Department of Space or Department of Atomic Energy route.

(c) Education at both the mass level and for excellence to serve national needs at all levels has to be increased exponentially and the state has to be the primer here. We need at least 10 more institutes like the Indian Institute for Science, Bangalore. A number of Central Universities could be upgraded for this purpose, while the State Universities could look after the masses.

(d) We need to look at the globalisation processes that have led to closure of small and medium scale enterprises. All these enterprises require technology and institutions like the CSIR (Council for Scientific and Industrial Research) should be providing the technology inputs to the small scale sector, the medium sector and the entrepreneurs of the country.

(e) As regards the trading system, the emphasis has so far been on free rather than fair trade, and it should be our endeavour to raise our voice in this area to get a more favourable dispensation.

(f) High sustained growth is not feasible without increasing the purchasing power of the masses and we will have to have new instruments to apply for this.

Second Session: Second Paper

Shri Mohan Guruswamy

(Paper presented by Captain S. Samaddar, Indian Navy)

India is in an extremely difficult position. It has all the security threats that a large and powerful country can have. It has two large inimical neighbours and we do not know where we stand with our other neighbours. It also sits astride two major geo-cultural fault-lines. These are security concerns which most of you would be extremely familiar and may even know how to deal with. The economic threats to our national well-being seem more intractable and we can least afford to be sanguine about them. Unfortunately, we have so far not shown much promise of being able to extricate ourselves from the economic doldrums we have been in for a while now.

It is not within the military power of any nation in this world to either annihilate India or tear it asunder. That power rests within and if we are unable to set a more hopeful course, we may soon find ourselves on dangerous and destructive economic shoals. In a changed world economic environment where national economies are no longer impervious to external market forces, the only *mantra* to secure us from the buffeting winds of the global economy is to become competitive. This will make us a magnet for investment, both domestic and foreign.

Let us make no mistake: the conditions that attract foreign investment are not very different from those that attract domestic capital, particularly in an economy unfettered from the old paradigms. At the same time, we need to meet in some measure the growing aspirations of a demographically young nation, where the grind of poverty and backwardness not only make people restive but an ever growing economic burden.

The central problems of the Indian economy continue to be widespread– extreme poverty, low productivity and ever increasing disparities. If the performance of the post-1991 era is to be judged by these yardsticks, then there is very little that can be said for the process that was ushered in by the Narasimha Rao government. What can be said is that the only real benefit of liberalisation was that it freed certain sections from the oppressive control of the state, which, under the pretext of central planning aimed at creating a socialist pattern of society, actually created a corrupt system that resulted in a vastly unequal and under-productive society. The sections that were liberated from the oppressive and often mindless control of the state not surprisingly were the very ones that benefited the most when we were trying to create a "socialist society". Liberalisation, as we know it so far, has still failed to address India's core economic problems. Poverty has grown. Productivity has fallen. And income inequality has widened.

The facts now available indicate that we have not done too well after liberalisation. So much so that even its progenitor, former Prime Minister P.V. Narasimha Rao, has called for a rethink on the impact of the policy shift he and Dr Manmohan Singh so boldly began. That there are still many economic and political dinosaurs around who hanker for a command economy itself suggests that liberalisation has not gone off too well. It seems that unlike dinosaurs, which became extinct 65 million years ago when a giant meteor crashed into the earth resulting in a series of cataclysmic events, Narasimha Rao's liberalisation meteor was a bit of a damp squib. That is mostly due to the fact that instead of becoming an all encompassing process that would not only free the economy and stimulate entrepreneurship and creativity, but also restructure the government to make it more accountable, transparent and honest, it just became an initial first step that did away with the quota allocating industrial licensing policy, opened more areas to foreign investment, but little else.

One could argue that without the liberalisation package, the condition of the economy could have worsened. This is very plausible. The roots of the problems that afflict us today were sown in the previous decades. We know what these are. The biggest failure, therefore, of the "reform" process ushered in 1991 was that it just did not do enough. It has now remained stalled for long in the mire of crony capitalism and bureaucratic sloth.

Stripped of all rhetoric, liberalisation was intended to primarily do two things. First and foremost, it was supposed to accelerate industrial growth. Next, it was supposed to attract huge inflows of foreign investment to finance

infrastructure development. Neither happened. Industrial growth in the decade 1981-91 was 7.7 per cent. Since 1991-92, it has been 5.8 per cent. Foreign Direct Investment (FDI) from 1991 to 1999 amounted to US$ 12,879 million. Of this, US $ 2,440 million comprised non-resident Indians (NRI) investments, suggesting that a good part of it is actually money clandestinely stashed away overseas. Former Finance Minister P. Chidambaram, one of the more hyper-enthusiastic high priests of liberalisation, was of the view that India needed about US$ 10 billion or Rs. 43,000 crore of FDI a year if it had to pull itself up to world standards by the middle of the current century. Instead of the US $ 90 or so billion we wanted, we have so far attracted only US $ 13 billion. So how good was our liberalisation?

There are other indicators too that strongly suggest that our liberalisation rather than speed up our growth and development, actually slowed it down. Agricultural growth, which averaged 4.04 per cent per annum (p.a.) for the decade 1981-91, fell to 2.3 per cent p.a. for the period 1991-99. The impact of this can be most seen on food prices. The average annual price rise during the 1980s for food articles was: Rice - 5.6 per cent, Wheat - 5.7 per cent, and Pulses - 11.2 per cent. During the following decade, these changed to Rice - 10.2 per cent, Wheat - 9.5 per cent, and Pulses - 11.4 per cent. Since 1981, the area under food grains and oilseeds crops has remained almost static at about 150 million hectares while the number of people working on the land has increased from 186.2 million in 1991 to 228.2 million in 1999. This suggests a major slowdown in the growth of real incomes and wages in the rural sector because food grains production only grew from 176.4 million tonnes in the year 1990-91 to 192.4 million tonnes in the year 1997-98. The World Bank estimates the annual average growth of wage rates of unskilled agricultural male workers in the 1980s to be 4.6 per cent as opposed to 2.5 per cent in the 1990s. It would seem that but for lower wages because of greater availability of farm workers, the rise in food prices would have been higher. While all through the 1980s, the Wholesale Price Index grew at the average annual rate of 6.9 per cent, it grew at 8.8 per cent in the liberalised roaring 1990s.

Employment generation in the organised sector too suffered. It was growing at a modest 1.6 per cent during 1981-91, just about keeping pace with the population growth rate. Since then, the growth in jobs in the organised sector has halved to 0.8 per cent while the population grew as before.

The power sector, which was a major source of concern at the beginning of the last decade, also did not show any great leap forward though the centerpiece of the liberalisation policy was the opening up of the sector to foreign capital and ownership. Even after this, the growth of electricity generation fell to 3.5 per cent p.a. for 1991-99 as opposed to 12.4 per cent for 1981-91. Electricity generation growth fell from 17 per cent to 7.8 per cent for the corresponding periods. The cumulative annual loss suffered by all our states together is now in excess of Rs 40,000 crore each year. Such a colossal loss makes the power sector extremely attractive for investment. Further, this loss is an undeclared subsidy and comes at the cost of urgently needed development investments.

The foreign trade picture too was to radically change as a result of liberalisation. This it probably did. Imports, which were growing modestly at the rate of 4.5 per cent p.a. during 1981-91, spurted to 7.97 per cent p.a. during 1991-2000. But did it make a big difference to exports? Not really, because the change was miniscule—from 8.28 per cent to 8.41 per cent. All the time we were being told that if imports grew, so would exports. But that just did not happen. The trade deficits have been growing exponentially. In 1980-81, the adverse balance was Rs 5,838 crore. In 1990-91, this was Rs 10,645 crore. In 1998-99, it swelled to Rs 55,478 crore. It would seem that besides devaluation, ostensibly to make exports more competitive, we have had no foreign trade policy worth the name. In 1981, the dollar was worth Rs 8. In 1991, this changed to Rs 18 and now to a little more than Rs 48.

The 1991 Census confirms that even after four and half decades of Independence, over 80 per cent of all rural workers are employed in the agricultural sector. As many as 52 per cent of the men, and 18 per cent of the women living in rural India are farm workers. In many states, the dependence on the agricultural sector for employment has increased. This continuous assured supply to the rural sector clearly has a depressive effect on the daily wages of agricultural and other rural workers. It is small wonder that they comprise the bulk of the poorest among the poor. Over 85 per cent of the daily income of these workers is spent on food articles. Clearly, the brunt of the impact of the high rate of inflation that has been a characteristic of the entire period has been borne by this sector. The wholesale price index for food grains has gone up by 90 per cent. Cereals have gone up by 63 per cent. Pulses by 86.7 per cent. Vegetables by over 100 per cent. Sugar and gur by 87.4 per cent. Thus, the rate of effective inflation for this sector

has been over 25 per cent as opposed to the general annual rate of inflation of around 10 per cent.

The per capita income of people in this category is much below the national average of around Rs 7,000 per year. It is estimated that the farm worker on an average is employed for less than 150 days a year. Even assuming a daily wage of Rs 40, this amounts to about Rs 6,000 each year. If the wife is also working, this could at best mean a family income of about Rs 12,000 per year or a per capita income of Rs 2,400 a year for a typical family of five. In reality, this situation is even worse as the lower the income, the larger the family size, which means not only more children but also more other dependents like aged parents. So the poor are really much worse off than the average figures would suggest. The average in a country such as ours with the prevalent high-income inequality is actually quite high when compared to the norm.

More indicative than the average per capita income, which is the GNP (Gross National Product) divided by the population, would be the distribution of incomes. Surveys by the National Council of Applied Economic Research (NCAER) reveal that almost 59 per cent of all households, accounting for 526 million people, have an annual income of less than Rs 12,500. This means a monthly household income of about Rs 1,000 or about Rs 200 per head. This, by any yardstick, is an abysmally low figure and makes a better poverty line than the government's generally accepted poverty line. Households with incomes between Rs 12,500 and Rs 40,000 per year account for 331 million people. Only 4.1 per cent, accounting for 37 million, have an income of over Rs 40,000 a year. Even within this group, it would seem that a few have got it all. The NCAER has also estimated that 1.4 million Indians have an annual income in excess of Rs 5 lakh. It would seem that this is the group on whom all our economic reforms and the faculties of our *sarkari* economists seem focussed.

By the Government of India's own admission, about 240 million people live below the poverty line. The poverty line is really the line of destitution. At this line, people have just enough money to provide themselves with food converting to 2,200 calories, and nothing else. No roof, no clothes, no security, no minimal comforts, let alone schools, medicine and any fruits of the industrial revolution, let alone any of the other techno-economic revolutions that have followed! It is not the consecutive devaluations of the rupee, or the unprecedented inflation, or the widening of the trade deficit, or the phenomenal increase of the foreign debt, but the increase in the incidence of poverty since 1991 that really indicts the successive regimes and the stunted process of liberalisation that took root in India.

It follows that our economic programmes must be aimed at the upliftment of the majority of our people who are poor. In the last ten years of the various governments, the economic debate has been focussed on the supposed industrial and infrastructure development of India that is supposed to be spearheaded by foreign capital. The budgetary allocations for most development programmes have been slashed. The development of human resources has been largely ignored. If India is ranked 39th in terms of competitiveness or more accurately the lack of it, the fact that almost 50 per cent of the population over the age of six is illiterate or that expectancy of life is a mere 58 years also has got a lot to do with it. We do not seem to be learning even now that no economic development is possible if the capability of the majority of the people continues to be sub-marginal.

Very clearly, there is no money in the kitty to make any meaningful allocations for real development. Each year, we go through a budget exercise, which generates a lot of hoopla without making a whit of a difference to how the country's finances are being managed. After making provisions for interest (Rs 1,05,000 crore); defence (Rs 70,000 crore); salaries (Rs 4,50,000 crore); direct subsidies (Rs 8,000 crore), there are hardly Rs 20 to 30,000 crore available for any development related expenditure. What happens in practice is that as each year draws to a close, the Finance Ministry realises that its expenditures have once again been out of control and its revenues and collections have fallen behind. So every year, the provisions for development are drastically slashed. As a result, the ratio of capital expenditure to the budget has been showing a declining trend for each of the past ten years. What then generates the euphorias or moans that follow after a budget is proposed are the marginal changes that give or take away the goodies from the only people who matter in this country. People like us, the ones with the decibels. You don't agree with me? What would you say if the government was to remove the subsidy of more than Rs 120 per cylinder of domestic gas?

If money has to be found for development, then clearly something must be done to break the fiscal logjam. Either expenditures are cut drastically or money found out of the system. Revealed and hidden subsidies account for more than Rs 100,000 crore each year. The total cost of government employees – central, state and local – is a whopping Rs 180,000 crore or almost 10 per cent of the GNP. At times, the only reason we the people

exist seems to be to support the colossal number of people who are notionally in our employment. But we are unable to even contemplate this problem given the manner in which the political economy has loaded the electoral dice. So we will waste money on self-absorbed government employees and not have money for schools, hospitals, roads, canals and whatever else is so essential for our well-being.

This is why the longing for foreign capital. But not much of that is going to be forthcoming till we get our act together. Then what will come will be a fraction of what we need. In any case, no foreigner is going to invest on roads, canals, dams, lift irrigation, primary schools, public health centres and the like. Foreigners will, but naturally, look for quick and easy pickings. Money to transform India radically must come from within. That means releasing capital locked in the unproductive public sector, slashing subsidies and cutting governmental expenditure. Implicit in this is that the role of the state in arranging our lives must reduce. Not only has the government no business to be in business, it has to grow smaller to become more effective. The public administration paradigm is as much to blame for our dismal performance. Yet no debate has taken place on restructuring the government. Power to the people must no longer be a mere slogan, and the power to manage assets like schools, hospitals and local infrastructure administration must be given to smaller administrative units like districts and municipalities. No process of liberalisation will succeed if we cannot get the government off the people's already overburdened backs. Liberalisation not only means less government but more local government.

Economic reforms can only become meaningful when accompanied by a change in focus, and restructuring of the system of government. Over-centralisation of the government results in the allocation of scarce resources to the already privileged. We see abundant evidence of this in all walks of life. Typical of this is the system of education that prevails in our country. The quality of education and the infrastructural facilities that deliver it to the majority of Indians living in the hinterland is related to the amount expended upon it. On the other hand, institutions of higher education in our urban centres, catering mostly to the upper class and caste elite, are highly subsidised and account for a greater share of the appropriation for education. Another typical instance is the amount expended on civil aviation, which historically, for the past decade and a half, is more than what is allocated for irrigation. This list can be endless. I do not want to labour upon it.

I would like to end with an excerpt from the IMF's prescription on the issues arising out of globalisation: "This has brought new urgency to policies specifically designed to alleviate poverty. Countries with a strong growth record, pursuing the right policies, can expect to see a sustained reduction in poverty, since recent evidence suggests that there exists at least a one-to-one correspondence between growth and poverty reduction. And if strongly pro-poor policies—for instance, in well-targeted social expenditure—are pursued then there is a better chance that growth will be amplified into more rapid poverty reduction. This is one compelling reason for all economic policy makers, including the IMF, to pay heed more explicitly to the objective of poverty reduction."

Discussants

Mrs Sudha P. Rao

The speakers have made detailed presentations on a topic of considerable importance with much eloquence. The report begins by looking at the theme chosen for this session. Next, the manner in which each speaker has dealt with the subject. Alongside, some specific issues raised by the learned speakers are discussed.

The Problem Areas. The subject of this session is a complex one. It encompasses virtually all aspects of the functioning of the economy and its governance, and that too, against a global backdrop. The task of identifying "the essential" is, therefore, difficult. The theme has three key words namely, "Characteristics", "Vulnerability" and "Globalisation". Going from the general to the specific, we could re-order the sequence of words to be globalisation, characteristics and vulnerability. The first word, "globalisation", refers to an ongoing process of economic openness and integration in the world economy. The second, namely, "characteristics", refers to certain inherent or in-built features of the Indian economy, which, in the context of the present seminar, make it vulnerable to the forces unleashed by the process of globalisation. The essential task is then to identify a sub-set of the features of the Indian economy that make it vulnerable in the process of globalisation. How have each of the papers dealt with this problem?

The First Paper. In his paper, Shri Guruswamy, has focussed on the negative consequences of the liberalisation of the Indian economy during the last one decade. He notes that the root causes of the economic problems that afflict us were sown in the previous decades. This paper highlights some of the long standing issues and problems relating to poverty, income inequalities and the growth performance of industry and agriculture in the context of liberalisation of the economy during the 1990s.The paper has highlighted the poor performance of the industrial sector and the low rate of inflow of FDI. These areas, according to the author, were the primary focus of the liberalisation process. He laments that industrial growth has been tardy. In purely statistical terms, he is correct. Major industries like sugar, iron and steel have performed badly. But then, industrial growth especially during the second half of the Nineties, has hardly been commendable anywhere in the world. While economic slowdown has been a reality for all economies, India has been an exception in terms of its growth rates. The key question, then, is how have we done in weathering the shocks, both internal and external, as compared to other economies?

Aggregate growth rates often conceal underlying trends. In a large federal economy like India, the composition of growth across sectors and the distribution of growth across regions holds the key to understanding the sources of vulnerability. While on the issue of composition of growth, it is hard to ignore the fact that the services economy has been the fastest growing component of the GDP. The composition of the Indian economy has been undergoing a change. Even shorn of the public administration component, the services sector has been growing rapidly, though the nature of its growth has been somewhat of a black box. The 1990s have witnessed the coming of age of the IT sector. Indian companies like WIPRO, Infosys have been front-runners. These companies have been an integral part of the globalisation process. However, the rapid growth of the IT sector (in India) has raised concerns about the sustainability of its growth, since it is largely dependent on external markets. The IT sector has been a high wage island and its growth has few backward linkages. Some researchers have cautioned against the excessive dependence on foreign markets. This brings out a new dimension that even newfound strengths bring with them new sources of vulnerability.

The paper has highlighted the lack of growth in the power sector as one of the indicators of a failed reform process. It has, however, surprisingly observed that the colossal loss in the power sector makes it extremely attractive for investment. May be this observation has a double meaning. There are clearly serious questions of institutional transformation and regulation that need to be addressed in this sector since energy is a

prerequisite for economic growth. Our measure of vulnerability is, therefore, the inverse of the speed with which we could make this sector viable. Surprisingly, the larger issue of the energy implications of the current growth pattern (especially in the transportation sector) and energy security in the global context does not find a mention in the paper.

On the issue of poverty, the paper notes that extreme poverty and disparities are the central problem. One could hardly disagree on this. But the performance on the reduction of poverty during the last one decade has been far better than what has been pointed out in the paper. As a matter of fact, the results based on data on consumer expenditure from the 55th round of the National Sample Survey show that the incidence of poverty in the country has declined perceptibly in absolute terms and as a percentage during the last one decade. Similar observations can be made with regard to the agriculture sector. While the overall growth of this sector has come down in the Nineties, the issue today is one of distribution. We have large food stocks, but regions with food deficit. We still need to arrive at satisfactory mechanisms to ensure food security to those who need it most.

The basic characterisation of the problems faced by the Indian economy as presented by the paper is valid even if there can be a difference of opinion on the statistics presented. But our main concern is that this paper does not touch the key issue. In order to get to the heart of the matter, we must first make an effort to understand the nature of forces that globalisation is unleashing. An understanding of the root causes that underlie the symptoms can then help us in identifying the areas of economic vulnerability of the Indian economy.

The Second Paper.The paper by Vice Admiral Raman Puri is well structured where he brings out the vulnerabilities of the Indian economy in the backdrop of the two processes, namely, globalisation and liberalisation of the economy. He identifies the conditions of labour and food security to be areas of vulnerability for India.

In the case of labour, he advocates that coordinated efforts by trade unions need to be made across countries to counteract the global tendency of employers to push down wages. While his concern for labour is understandable, negotiations in the WTO have made it clear that the interests of labour in the developing countries do not necessarily correspond with those of the developed countries. Interestingly, even in this era of globalisation, the interests of labour seem to be local.

On the question of food, the paper points out that volatility of prices in international markets has led to instability and insecurity. He has advocated that agriculture should be removed from the purview of the WTO. Given the broad distribution of bargaining power in the world, we need to carefully assess whether or not a multilateral forum such as the WTO, with all its limitations, is better, as compared to bilateralism, before taking such a hasty step.

The paper views globalisation as a force that is likely to weaken the federal structure. He observes that the global structures have begun to penetrate local spaces without much mediation either by way of protection or control from the states, centralised institutions of planning, and bureaucracy. In India, the areas where the central government has been playing the role of an intermediary have typically been in routing of finances, investment and foreign aid. This continues to be the case. But the forces of globalisation are insidious and are not always controllable. They work through multiple routes like the media, the NGOs and not the least the MNCs. With regard to the race to attract investment, some economists have been warning against the tendency of different state governments to undercut each other in offering different types of fiscal incentives, thereby leading to a race to the bottom. The issue raised by the author is, therefore, relevant and we need to carefully document and study how other countries are coping with these tendencies.

It is interesting to note that some of the measures that Admiral Puri is advocating are required under the new order of globalisation. For example, he has suggested that protection of intellectual property rights in knowledge based products must become a national priority. In other words, what is being suggested is that if it suits India's interests, she should not hesitate in using the very same measures that have proved to be discriminatory and against its interests so far. This is a suggestion for taking a proactive stance in dealing with the force of globalisation rather than being constrained by any ideology.

The session has focussed on some of the negative aspects of globalisation and its effects on the Indian economy. We should not lose sight of the fact that in every threat there is also an opportunity. The fruits of these opportunities can tilt the balance in favour of globalisation. To conclude, it may be emphasised that both papers have raised several important issues that need to be considered in the process of globalisation.

Air Vice Marshal Viney Kapila, AVSM, VrC (Retd.)

Two papers were presented at the second session of "The USI National Security Seminar 2002" on the very important and topical aspect of "Vulnerabilities of our Economy in the Backdrop of Globalisation: An Analysis of India's Long-Term Economic Security". Both papers highlighted the performance of the Indian economy after the process of opening up of the economy which was started in 1991.The presenters emphasised the point at the very outset, that the objective of "Opening the Economy" was to ensure a surge in industrial growth, increase in agricultural output and infrastructure development, leading to a rapid growth of the GDP, and the trickle down benefits that would accrue to the economically weaker sections of our society. More employment would be generated and the people below the poverty line would benefit by a large reduction in their numbers. There would be more equitable distribution of wealth which would, thus, help the nation move into the global economy as a stronger partner and help in achieving the potential that India has.

The statistical data put forth by both presenters, however, drew a rather grim picture of the actual performance of the economy. They highlighted that the growth rate of the economy was perhaps better in the days of "Command Economy" and that if any benefit had accrued after opening the economy, it was only to those who were already generating wealth for themselves, with very little to contribute to the benefit of society in general. The term "Crony Capitalism" was alluded to in the framing of policy, wherein pressure lobbies ensured that maximum benefit was derived by the already well-established industrial houses. Very little foreign investment came into the country, in fact, it was approximately 15 per cent of what was anticipated. The low productivity levels of Indian industry also attributed to this low FDI, apart from the fact that the rather intricate procedural process and in-built delay drove away the investors. Corruption at the higher levels, both political and bureaucratic, has increased and is now an endemic way of life for any dealing with government departments.

It needs to be highlighted that of all the ingredients that contribute to national security, economic security is a most vital one. No nation that is economically weak can ensure its national security and withstand pressures on other fronts. In the case of India, the weakness of the economy in the aspects of GDP, productive industrial growth, stagnant agriculture, low FDI, lowered per capita incomes in the agricultural sector, inadequate development of the infrastructure, high poverty as supported by the statistics when coupled with the large disparity in wealth distribution leading to social disparities and deprivation form a real-time bomb that is ticking away for large-scale internal security problems. The aspect of the reality of crony capitalism and its adverse effects is clearly visible to the discerning. This is also highlighted by the fact that the two economically backward states viz. UP and Bihar, send the largest representation of Members of Parliament (MPs) to the Parliament and yet legislation is seldom taken up so as to alleviate their status, so the MPs invariably become part of the various lobbies. Therefore, when two vital ingredients viz. economic security and social and cultural security are coupled, the portends for the overall national security scenario are a definite cause for concern and correction.

Important factors that need to be addressed are meaningful and just labour reforms, so as to enhance the low output attributed to Indian labour. Increase in investment in frontier technology research, particularly areas affecting national security, needs to be given more thought. Investment in R&D for defence needs to be made to ensure that as we hit the oncoming and inevitable replacement cycle for defence equipment, we can catch up with the relevant technologies and do not have to be over-dependent for our vital needs.

There is need to temper our efforts keeping in mind the examples of the South American economies. The high indebtedness of states like Bihar and its plight is a precursor to the national dilemma, if corrective measures are not put in place on priority.

General Discussion

Brigadier Mehra

We have a poor record of pursuing finally to victory and have been missing opportunities. Is there a way of bringing in a culture of getting things moving?

Ambassador S.K. Bhutani

The first question is about sovereignty. When we signed and accepted the trade terms of the WTO, we surrendered our sovereignty. We no longer have the right to fix our custom tariffs. We have to explain if we give any subsidies to our industry. Even if we fix the ceiling of tariffs higher, the pressure is on us to bring the ceiling back to the actual level. We had a choice. But we found that we could not do without it either.

The second question is of fiscal responsibility. This is not our suggestion, but a suggestion from the IMF. It is phrased in such a manner, that if we accept the IMF's suggestion, then they would decide our fiscal policy. I do admire our Members of Parliament; in their typical dilatory tactics,they have postponed it by two years,till there can be a consensus, so that the government retains the right to have a deficit, so that it can carry on with its social welfare policies. If we follow the fiscal responsibility act as suggested by the IMF, we will have no choice except to expect more cuts in social expenditure.

The third question is about labour productivity. I agree that our labour productivity is poor, but our wages are low. If you want international productivity, pay international salaries. Starting with doctors in the 1950s and 1960s, everyone wants to go out of this country,because they feel (probably rightly) that they get a better deal abroad. So we should balance our labour productivity demands with the salaries we pay.

The fourth point is about literacy.We should be clear about our education policy. True, our literacy levels are low, because we spend a lot more money on higher education and the result is that we are considered to be a knowledge power and not a manufacturing power.

Brigadier Batra

Government procurement is a part of the WTO agreements. In 1995, it was $ 25 billion; by 2005-10, it will be $ 1 trillion. It is not going to be brushed away. As it is,the defence sector and ordnance factories have given 26 per cent equity to the private sector, allowing foreign participation, and all they are saying is that you could give 15 per cent concession for government procurement from public sector undertakings. It is a reality which we have to face. Now, regarding the FDI, they want an assured return of 15 per cent.In the capital city, you can compare one bridge built across the ITO (built locally) and one across Nizamuddin (with Japanese help). The locally built one had cost and time overruns. The end result was more congestion. The Japanese project of Nizamuddin was completed 15 days in advance.

Regarding the power sector, it can be cheaply produced locally, but we lose on frequency and voltage and there are frequent breakdowns. You have to pay a higher cost per unit for the power generated by foreign companies. The need to have a balance in this sector did not emerge clearly.

Commander Radhakrishnan

This refers to intellectual property rights and patents. I am under the impression that patents have a very limited life, of a maximum of 10 years. There are lots of products that are patented abroad and I do not see any reason why we cannot look at these things and see which patent is running out. We should start manufacturing those of interest to us.

The second is a comment on what Mr Bhutani said about doctors going away. Robert MacNamara, when he became the President of the World Bank, was asked why people like doctors and engineers migrate to the advanced countries. His answer was, "Brains are like hearts, they will go whereever appreciated".

Vice Admiral Raman Puri

In response to Brigadier Mehra's question, my philosophical response is that ever since we adopted *Ahinsa* (non-violence) as a policy, since Asoka took it up, we have continued with *Ahinsa* throughout, although the culture of India is not one of *Ahinsa*. The culture of India is based on the *Ramayan* and *Mahabharat,* where it was a fight for justice. For the sake of Sita, there was a war, for the sake of the five Pandavas, there was a war, which, in today's terms, would be a nuclear war. But, somehow, we have, over the years, continued with *Ahinsa* in everything we do. We have a psychology of fear itself. The only thing we have to fear is fear. We can do things, yet we depend on somebody coming from outside to do the work. Look at the example of the Department of Space. The fact is that the technology that they are dealing with is perhaps the highest that we have. Yet, a satellite made by the Department of Space, with all its limitations, is one-third the cost of a satellite made anywhere else in the world. Something that our diplomats miss out. Everybody feels we cannot do anything.

We were in the licence permit raj system and the system stifled our entrepreneurs. We have discarded the licence permit raj system and have replaced it by imposing the WTO. Another regime of transnationals and multinationals has been imposed with such depth that they will wipe out everyone, without the entrepreneur getting an opportunity. This is because we feel that we can do nothing. Projects like the DRDO (Defence Research and Development Organisation) project on the Electronic Warfare (EW) System for the Navy which we have pursued, have been successful. Similarly, we have achieved good results in the maritime patrol aircraft radar in three years time. With pride, it can be claimed to be of world class. This is because of the "we can do it attitude". As far signing the WTO is concerned, so many nations have signed it. So has China signed. We have no FDI coming in anyway, so why worry about it.

As far as fiscal responsibility is concerned, the *bhandars* (godowns) are full, but in the area where I live and operate, I hear of starvation deaths every second day. What is this fiscal figure? To me, physical economy is much more important. Let those *bhandars* be emptied and let there be food for work. I think that will have an impact. I do not think we have to listen to the IMF. What will it do? I want to know. There is a dogma that reforms are not irreversible. Why is it so? May be some treaty obligations, etc, are, but Chanakya told us how to work through these processes, so let us try and work.

I agree that labour productivity and wages are low, that is a fact, and we can pay better.

As far as higher education is concerned, I beg to disagree. The cost of higher education in this country is not very high. The amount that we spend on it is pittance. If we were to investigate, we would find that it is not because of institutes of higher education that primary education has lagged behind, it is due to inefficiency and theft in the system. There is enough allocation of funds for everybody. If teachers are absent from classes, if blackboards are missing, and the money has gone somewhere else, let us not blame higher education for it. It is a simple question of lack of governance. As far as higher education is concerned, we are spending too little.

The Council for Scientific and Industrial Research(CSIR) which used to support small scale industry has had a lot of success. Unfortunately, this has not been highlighted by the globalised media. Unfortunately, all its reports were written not by technologists, but by economists. With due respect, Shri Abid Hussain has written some. I agree that there are a lot of things to be done in the sector of science and technology also. But let us not decry it. I believe that it has done a lot and it is capable of doing much more, provided we demand from it and say that yes I am going to go through with you and I am not going somewhere else for collaboration. I think we will succeed.

There should be investment in the power sector. But nobody would buy power produced at Rs 7 per unit. Industries would go sick with those rates. That has happened to a number of industries. The rate of power supply has to be viable. That is the fundamental problem with Enron. The project cost is estimated as Rs 7,000 crore. Its real value in an open tender (if say, the Tatas were to buy it) will be Rs 2,000 to 3,000 crore. No one has been held accountable for it. Problems, therefore, are of our own making and of our suffering from what I at times call AIDS (Advanced Izzat Deficiency Syndrome). We should stop calling ourselves a Third World country in the first place, as by now we have substantial development to our credit.

Captain S. Samaddar, IN

I am in agreement with what my C-in-C has said. I would like to emphasise two issues. The first one is the question from Brigadier Mehra. I think what this country needs is a wave of optimism. Having read Mr Guruswamy's paper and data, I, as a mid-40s Indian, am full of hope and optimism for the years ahead. We have a fairly good statistical record and if we can just get our act together, I am sure one day we will find our place in the sun.

On the issue of sovereignty: recently I wrote a paper on Freedom and Security. Human evolution is the story of the abrogation of sovereignty. From the period of the Stone Age, man gave up his own individual sovereign right to live with his clan, and then, the state assumed the responsibility for violence, and today, we find markets and, so on, and so forth. So, as Admiral Puri has said, not only India, but many other countries have also signed the WTO and nobody seems to be the worse off for it. Things seem to be working well. We just need to find out how to make it tick.

As regards labour productivity, China probably has lower wages than India and its productivity and quality of goods are pretty good. I have a Chinese made golf set which works pretty well and did not cost very much.

We need to look at economic vulnerabilities in two parts. The first relates to protection of the resources of production. That should be our first strategic thought. If we were to make out a strategy for this, it should be a simple, straight-forward one, well understood by the whole country. My simplistic solution is that an economic security strategy must work on two issues. Firstly, it must protect the resources of production like human resources, material and technology. Secondly, it must ensure the protection and promotion of the markets for these products. So if we can put our heads together and see what we need to do on these two issues, we should be on the upswing. The second point is about economic activity moving from the state to several non-elected, unaccountable bodies and boards of many MNCs and TNCs. We can make any amount of legislation and keep discussing the pros and cons of it, but this is something we have to live with. It is better if we start finding the ways and means to get around this unaccountability of boards and MNCs to see how we can make things tick.

Air Vice Marshal Viney Kapila

In response to two points by Ambassador Bhutani. Firstly, you will agree with me that capital flows where the inputs are the least and output ratio is the maximum. One of the reasons why capital from Japan was invested in the tiger economies was because labour was cheap there. When labour there got expensive, they started looking towards South Asia. The cost of living index of a country is relevant to the wages paid. The wages that the labour unions have negotiated for the Indian labour are not very different from other sectors, based on the Indian cost of living index. Ambassador Bhutani would also agree with me that he never got the pay the US Ambassador gets, because of the Indian cost of living index. To that extent, I would join issue with Admiral Puri, that labour cost notwithstanding, the productivity of Indian labour has notoriously been downgraded and is below par.

The second aspect is regarding tariff and non-tariff barriers. Yes, as Ambassador Bhutani says, sovereignty has already been signed away, I wonder who has paid for signing away that sovereignty? If any Army Commander were to give away even ten square metres of territory, he would be under the chopping block. I see nobody who has been held accountable for signing away the sovereignty which was so correctly explained. The question is how do we respond? America has an 18,000 pages trade non-tariff barrier regulation. With our genius, we can surely prepare one with 28,000 pages. If they do not want our stuff, we can prevent their stuff from coming here. It is a question of taking the battle to the developed world.

Chairman's Concluding Remarks

I would like to add a few points. First of all, what is the state of the Indian economy today? The general impression that emerges is that things are not all right. The Indian economy is the second largest growing economy in the world. I was in Saint Monica, USA, a couple of months ago, and according to statement of the RAND Corporation's chief economist on China, it is India that is the fastest growing economy,because the Chinese statistics are suspect. Six per cent is an amazingly high growth rate. Let me translate that into actual life. If average life expectancy is 72 years, and the economy is growing at less than 6 per cent and population growth rate does not fall in the future, then per capita it is increasing at 4 per cent a year. In other words, when you leave the world at the age of 72, you are 16 times richer in absolute terms in constant rupees, than when you were born. And since we may not be here around for 72 more years, and no one here is younger than 12 years, we can see what 6 per cent for 12 years means. If you are not impressed by the five-storeyed houses, then please be impressed by the person who puts up the bricks in the houses. He used to take Rs 3 a day 30 years ago, today he charges Rs 350 per day. It is no use saying that they are getting poorer. Your *dhobi* used to come earlier with the clothes on his head, then on a bicycle, and now he comes on a scooter. So the status and state of the Indian economy, of course, could be better, but it is not hopelessly bad. We are sitting on 65 million tonnes of food grain but we are not distributing it well. Indian software, and the services industries are on an upswing. The dissatisfaction is healthy in a way. We want to be better off, and certainly we can be, if we manage well.

There is endless criticism of the international treaties that we have entered into. There was no way out. We could not get out of the WTO. China negotiated for 10 years for entry into the WTO. Basically, it is wrong to presume that globalisation is a war against India—far from it. We would draw absolutely wrong conclusions saying that if there is globalisation, we are the targets of it. No. I think we have tremendous opportunities in it also, and let me give you one or two examples. Luckily, India is situated in the ideal latitudes for agriculture. Agricultural experts will tell you that the highest productivity exists because of weather, solar radiation days available and it is the best between 6 and 36 degrees north latitudes. We are between 6 and 32 generally. We can have three crops without any problem. We can be one of the biggest exporters of grain. In the year 1982, Senator Moynihan in a talk at the American War College on US-Soviet relations, mentioned that while the Soviets challenge and occasionally pin prick the US, we (Americans) should not worry so long as they have to buy 30 million tonnes of grain from us every year. They know that they can oppose us only to a certain extent and no more. There is no alternative place from where the Soviets can buy this grain till the end of the century when a possible other source, like India, may emerge. He said that it was on us (US) now to establish commonality of interest with India so that the Soviets do not consider ditching our markets to shop elsewhere. We are the third largest rice exporters in the world this year and a major wheat exporter, which incidentally we were before World War II. We should create the infrastructure and export. If we are failing in certain things then we cannot blame either the WTO or the West and perfidious sections of the globalisation trends. It is our problem of governance where monies have been channelled not into infrastructure but other structures for the benefit of a few people.

I think another question of debate is that of labour. One of the worst things which the socialist regime in India did was to give the idea to the people that one could get away without working. That was not the Soviet system from which we borrowed central planning. As someone said 40 years ago, only a J.P. Morgan or Stalin can run a successful economic system because J.P. Morgan would fire a person even though he had worked for 30 years for him, day and night, and Stalin would put him before the firing squad if he was not efficient. There is no question of mollycoddling the labour, and that you cannot do anything against them. Yes, they should be paid adequately. They should be given all the resources to upgrade their

skills. But they must work as well. We have failed in that, and now there is the recovery system or labour reforms which the current government had on the agenda this year. But whichever party is in the opposition, it says that anything the government does must be opposed and labour reforms are in that category.

The corporate world is about making money and producing things which you and I use. The people who sit on the boards of the corporate world are answerable. It is incorrect to say that they are answerable to none. They are answerable to the share-holders. They are greedy for making money for them. They have to do this because not only do they make money for them, they make enough money so that you can invest and increase the availability of the infrastructure. When in 1962 we had a World Bank team and they were looking into the possibility of Bokaro Steel which was not cost effective at that stage, Mr C. Subramanian who was one of the clever Ministers, said that we are not bothered about price. The Chairman of the World Bank team said that though you may not be bothered about the production price of steel, but when you are trying to sell the bicycle made from this uncompetitive steel, you will find that the Chinese will sell a bicycle at a cheaper price than the cost of the steel you are making the bicycle with—then you will find the difference. This is the sort of thing which we should be paying attention to.

You can be successful as a country and increase your economic well-being, if all the sections of society act in unison and you have something like "Japan incorporated" where the workers, business and government are all in the same boat. But, if we are going to be at the throat of the business community who are the producers of wealth, the owner of a factory can get away when you create such conditions and the factory is shut down. The owner is not bothered. He is well off, but it is the 5,000 labourers who suffer the consequences.

Let me give an example of the power of trade unions. Merchant ships in the last century used to carry a crew of about 80 in the days of the sail. In the coal era, this was reduced to 60. In the oil era, the strength came further down. Today, a foreign merchant general purpose cargo ship has a crew of 16 and a tanker a crew of 11 or so. But Indian ships still have to carry 57 crew members, because that is the rule of the Indian trade union. The fact of the matter is that the Chinese who started from 1/10th of shipping are now 10 times larger than our shipping tonnage. This is because we cannot compete in costs. The second thing is that when ships have to be bought and sold (that is one way of running a successful shipping company), a second-hand Indian ship cannot be sold because it has accommodation for 57 people, and, therefore, not enough space for carrying cargo. So until and unless we live in the same environment as the rest of the world as far as trade practices are concerned, we are not going to be successful in the highly competitive fields. Therefore, it is essential that we accept the reality of where we are and follow the general practices, improve our efficiency and governance and accept that the results lie in hard work. This must be appreciated by everyone—labour, agriculture and in the industrial fields.

MEASURES TO ENSURE INDIA'S ECONOMIC SECURITY IN THE GLOBALISED ENVIRONMENT

THIRD SESSION

Chairman	:	Dr. Charan Wadhva
First Paper	:	Shri Jairam Ramesh
Second Paper	:	Lieutenant General B.S. Malik, PVSM, AVSM (Retd.)
Discussants	:	Shri Sanjaya Baru Shri S.K. Bhutani, IFS (Retd.)

Introduction by the Director

We have had an excellent set of discussions in the two previous sessions yesterday. In some ways it was rather grim in the second session when we looked at the vulnerabilities of the Indian economy in the context of globalisation. Notwithstanding that, by and large, we have analysed both issues in considerable detail. This morning, we have an excellent group of panelists, and to take us through the session we have Dr Charan Wadhva, the Director of CPR and a very eminent economist. If he breaks out into Chinese during the session, it is because he has just returned from a visit to China last night, where he dealt with the weighty questions of economics in the globalised environment.

CHAIRMAN'S OPENING REMARKS

It is indeed a privilege to chair this session with very eminent and well known panelists whose presentations would be thought provoking. We already have had a full day of this very important subject of national security and both previous sessions have provided the backdrop for today's discussions. The third session is extremely important as it pertains to adopting measures to ensure India's economy in the globalised environment. A very practical and important subject on what should and can be done and what measures can be taken so that we preserve our economic security in the fast changing globalised environment. As was mentioned by the Director, I would also bring in comparisons with China. They too are preparing themselves for a very major global role, and already are in it, which we shall see later.

Third Session: First Paper

Shri Jairam Ramesh

I must begin with a note of apology that I have not really had the time, unfortunately, to actually sit down and write down the script. I have read the approach paper with which I have very little to disagree and which sets out the broad parameters of the sources of vulnerabilities for India in a globalising environment. But I want to begin by making a few comments on the approach paper. The approach paper very rightly points to the fact that India's internal fiscal position is a source of great vulnerability as far as the economy is concerned. There is uncertainty in the whole growth process as far as India is concerned. But there are some other comments made in the approach paper with which I am in disagreement. I need to point out these popular myths and fallacies that preoccupy our debate on external vulnerabilities. First, the approach paper says that India's external debt is a source of great vulnerability as far as the economy is concerned. I think there is a widespread belief in India that India's external debt is ballooning and that we have a $ 100 billion external debt and that we are just about to collapse. But if you really look at the structure and terms of our debt, most of you would be surprised to know that India is not a highly or moderately indebted country, but actually a low indebted country. It may appear paradoxical to you that with a foreign debt of $ 100 billion, which is about the fourth or fifth largest in the world, India is actually a low indebted country. If we look at the terms and conditions of the debt, then India's external debt, in fact, is not a cause for worry.

The first point is that in a globalising environment, the standard yardstick of comparison changes completely. It has often been said that Indians are comfortable with time series comparisons. "We did this 30 years ago, we did this 20 years ago, we were like this 10 years ago and we are better now

than we were 10 years ago. And, 10 years ago we were better than we were 20 years ago, and so on". This is a time series comparison done by Indians of a closed or semi-closed economy, delinked from the rest of the world. But if you are operating in a globalised economy and environment, the standard of comparison does not become a time series one. How are you doing it in relation to China, East Asia, Russia and other competitors? So, therefore, the entire mindset and yardstick become not what you did 10, 15 or 20 years ago, which may appear a big revolution as far as India is concerned, but really what you are doing vis-a-vis your own competitors, trading partners, neighbours and vis-a-vis any country that you may want to take as a yardstick. This is a very important point because as you would no doubt appreciate, judged in the time series context, India's performance is, in fact, quite remarkable. But if you look at it from a cross-sectional view-point, for example, if you look at it in relation to China or East Asia before the financial crisis of 1997, there is a big gap between what India promised to achieve and what it actually achieved.

The second general point is about the term globalisation environment. It refers to the external world. For a large country such as India, I think it is not just the globalising environment that is important, but also the regionalising environment within the country. The Indian economy, besides being in a globalised environment, finds itself in a regional one with sharp regional disparities, with peninsular India growing at higher rates of growth than north India; north India growing at higher rates than east India; east India growing at higher growth rates than north-east India. The sharp differentials in growth rate within the Indian Union have major implications, not just for internal security, but also for external security. In a globalising environment what happens is that regional disparities show up in much greater focus and, in fact, this is what has happened in the last decade. And, therefore, you have not just a globalising environment vis-a-vis the external world, you also have a regionalising environment within the Indian Union.

External Security

First, I want to make the obvious point that we need to distinguish between external and internal security. There is a fundamental difference to be made, analytically, if not in practical terms, between external economic security and internal economic security. As I mentioned to you right in the beginning, India today is actually on a much stronger wicket as far as external economic and financial security is concerned than it was 10 years ago. One of the reasons for this is the way India had managed its external debt position, its foreign exchange supply and demand balance. The sources of vulnerability which led to the economic collapse over a decade ago were a high proportion of short-term debt as a proportion of total debt. The high proportion of short-term debt is a proportion of foreign exchange earnings. In fact, you have today a very safe external sector. You take any index—the proportion of short-term debt as a proportion of total debt, a proportion of short-term debt as a proportion of foreign exchange earnings, or the current account deficit, which is really the trade deficit plus the earnings on the invisibles account—you will find that a striking feature is that India's position today is far more secure than it was 10 years ago. So contrary to what you often read in the Press, globalisation has, in fact, made India more secure externally.The reason for that is the calibrated manner in which we have managed our external debt.

Another point on the external situation is that unlike the countries of Latin America such as Argentina and Brazil, or countries like Russia and Turkey and certainly unlike the East Asian countries, the Indian approach to managing the external sector has been far more cautious. And if there is one element which introduces a great amount of instability as far as economies are concerned in a globalising environment, it is the pace with which economies integrate themselves with the international financial system. I think there is a fundamental distinction to be made between "trade globalisation" and "financial globalisation". In so far as trade globalisation is concerned, the evidence is unambiguous and very clear. Countries which participate much more aggressively and actively in the international trading system in terms of importing more and exporting more mercantile goods, trade and services, are on a far stronger wicket when it comes to managing a crisis. But countries which do not integrate themselves in trade dimensions, but seek to integrate with the world of international finance, in both the short and long term, introduce an element of vulnerability in their own development process. And this is the story of East Asia, Latin America, Russia and Turkey. But, this is not so for India and China. India and China are the two countries in the world whose approach to globalisation has been on trade globalisation, but who go slow on financial globalisation. This fundamental distinction has to be made when you are talking of the globalising environment. When you talk of the finance dimension, you are talking of a greater degree of vulnerability than when you are dealing with trade, and if there is one single element which introduces vulnerabilities in the domestic economy it is the process of integration with the rest of the

world—it is the pace and rate at which countries make their domestic currency convertible on the capital account. If you see India's track record, the Indian rupee is convertible for all intents and purposes on the trade account and current account for non-resident Indians and foreign investors and for the large population of Indian exporters, but for ordinary citizens, we cannot go to a bank with our savings and say that here are my rupees, convert them into dollars. We cannot open a bank account with those dollars either in India or abroad, say in Switzerland or America, and repatriate those dollars. The reason is the empirical evidence that in times of crisis, vulnerability is introduced not by the flight of foreign capital, but, fundamentally, it is introduced by the flight of domestic capital. People talk of "hot money" all the time as if you can measure the temperature of money and you can say that foreign money is " hot money". But actually, if you look at the Mexican, Russian, Turkish and East Asian experiences as also our own experience in 1991, the vulnerability that got introduced was because of the repatriation, not of foreign funds but basically funds of domestic residents, investors and entrepreneurs who had inside knowledge of the impending collapse of the economic and financial system. They took their money out and further exacerbated the collapse. So I think this capital account convertibility point is very fundamental in any discussion on external vulnerability. And what India has done in its own way, has avoided the risk of integration with the international capital, for investment as well as for speculative capital. Of course, the price that it has paid is that it has not attracted capital flows to the extent Latin America, Russia, Brazil or Turkey have. But, the important point to note is that it has avoided the risk of capital account convertibility which becomes a source of great pressure. The characteristics of modern financial markets are that they extract penalties from governments which are not commensurate with the crimes that governments commit. This means that the government may commit a small crime, but the penalties that are extracted by the financial markets bear no relation to it. In the 1990s, East Asian economies were running perfectly well, but the financial markets destroyed East Asia. The Turks, Argentinians and Brazilians are far more aggressive reformers than India has ever been, but the financial markets have extracted a much higher price for their inability to manage their finances than they have extracted from India. This is the price that you pay for international integration.

To summarise, on external security, judged by any index, India today is on a far more secure position than it was 10 years ago. In many ways it has become a victim of its own success and by distinguishing between trade globalisation and financial globalisation and going somewhat cautiously on the financial globalisation front and by postponing the introduction of capital account convertibility for domestic residents particularly, what India has done is that it has avoided an external collapse of the type that has characterised East Asia, Turkey, Russia and Latin America. On the external front today we are faced with an embarrassment of riches. We have $ 64 billion of foreign exchange reserves and we do not know what to do with it. Just 10 to 11 years ago, we had less than $ 1 billion of foreign exchange reserves. So this is a remarkable thing that has come about in the Indian system. As long as we maintain a cautious and nuanced approach to financial globalisation and introduction of capital account convertibility, India's external security front is not as precarious as that of many other countries of the world and certainly is far more secure than it ever has been in the last decade.

Internal Security

The story on internal security is very bad. In fact, the crisis of India is not an external financial security crisis. Basically, India is not exploding like Argentina or Turkey, but India is imploding. India is having a 5 to 5.5 per cent rate of growth but it is a pattern of growth that is frankly driven largely by the services sector. This point has been made in the approach paper. The growth is not coming from agriculture and manufacturing,and industries. And, therefore, it is not broad-basing the wealth creation process to the extent it should. So it is the internal insecurity that has been a characteristic of the Indian development process which is the fundamental cause of worry as far as India's economy is concerned. Here it is the internal insecurity. The central government faces the problem of internal financial security. The state governments face the problem. The public sector entities face this problem. So it is not as if we can point to any one element of this entire system, and indicate insecurity. The breakdown and bankruptcy is all pervasive and has been worsening over the years and has introduced an element of great worry in the system.

Why is so much attention paid to external security and not to internal security ? The reason is obvious. The internal debt is debt owed by one set of Indians to another set of Indians, whereas external debt is owed by Indians to the rest of the world. Therefore, you are worried about repaying the debt. Of course, there is an old principle in economics which says that when you have a heavy debt, you should not really be worried because if you owe someone $ 500, you should be worried, but if you owe somebody $ 5 billion, he should be worried. But our record of financial management has been that India has never defaulted. On the external debt, we have been very prudent. However, the internal debt has led to a situation where there is a great deal of complacency. You will find today very many people and the media saying that the fiscal deficit is not a cause of worry and, in addition to religious fundamentalism, we should not fall prey to fiscal fundamentalism. These are very dangerous signs. We are adopting a very casual and relaxed approach to the problem of internal insecurity. Briefly sketched, the implications of this internal insecurity are that the investment engine has come to a standstill in India. If you look at the state and central governments and the Public Sector Undertakings (PSUs), the consolidated fiscal deficit, which is the difference between what you spend and what you earn, including by way of borrowings, is 10 to 11 per cent of the nation's GDP, which is what it was 11 years ago. The household financial savings rate is also 11 per cent of the GDP. What this suggests to a layman is that here are households which are saving 11 per cent of the GDP, and here are the public sector entities which are incurring debt equal to 11 per cent of the GDP. This means that the household financial savings are being preempted by this huge sector and leading to expenditure in excess of revenue. The problem is compounded as the quantity of deficit is very high and the quality of deficit is very poor. One could argue that if the deficit arose from spending on railways and power plants, in which you could recover the cost of generating power, and expenditure on education, health, social and physical infrastructure, one can take the position that the quantity of the deficit is perhaps high, but the quality of the deficit is pro-growth and pro-development. Unfortunately, in India, not only is the quantity of the deficit high, but the quality is poor. The bulk (almost two-thirds) arises from interest payments (which is basically debt incurred in the past), open-ended subsidies enjoyed by sections of people who can afford to do without subsidies, wages, salaries and pensions of government employees. I do not have to recount the impact it has had on defence personnel in terms of overall budget of the government and, of course, the non-commercial expenditure on the public sector. So the quality of the deficit does not arise from spending on the social and physical infrastructure, the high deficit arises basically from spending on subsidies, public sector, establishment costs, wages, salaries and interest payments. Of course, some people would include defence in this category, but for the purposes of today's discussion, I am not including or attributing the poor quality of the deficit to defence spending, but to some other audience I might do so.

Therefore, the crux of the internal insecurity problem is the inability of governments at all levels to live within their means. The reason why they are unable to live within their means is because of rapidly expanding demands on the exchequer from basically these four elements: interest payment, subsidies, public sector upkeep, and establishment costs.

So, if this is the problem in so far as internal insecurity is concerned, I think the measures that require to be taken suggest themselves. The single over-riding measure to kickstart the economy, to get it on a higher path of growth, both nationally and at the level of the various states, is to restore a semblance of investor momentum in the social and physical infrastructure.This is not going to happen unless one brings about a radical reordering of the pattern of public expenditure and one is also able to increase the amount of revenues being raised and ensure that the revenues are actually earmarked for the physical and social infrastructure.

It is clear from our experience of the last 10 to 15 years that once you unleash the forces of economic globalisation, differentials become inevitable and are reflected in the growth performance. In fact, if you see the track record of the last decade, since the Indian economy really opened up to foreign investment and foreign trade, there are very sharp differentials.And the sharpening of regional disparities, I would argue, is the second most important aspect or dimension of the internal insecurity problem. You cannot have 40 per cent of India where the per capita income is growing at less than the rate of growth of the population. Which means basically that a greater part of the population is getting poorer and poorer. One can argue that in a federal system, we should not worry too much about regional disparities as long as there are areas of economic buoyancy. But, in our system, it would be difficult to sustain this argument and it would be very difficult to sustain the political system that we have if the regional disparities that have emerged in the last 10 to 15 years are allowed to grow unchecked, without public intervention. This regional imbalance between peninsular and non-peninsular India has grave implications for not just domestic policy but also regional policy vis-a-vis Bangladesh, Pakistan, Sri Lanka and China. So to summarise, I would say as far as the globalised environment is concerned, India has no cause for worry, except continuing its cautious policy of introducing capital account convertibility. On the internal side, the persistence of fiscal deficits, the inability to reorient public expenditures and raise public revenues, and the sharpening of regional disparities introduce new elements of internal security. If unchecked, these could threaten the very basis of sustained economic growth.

Third Session: Second Paper

Lieutenant General B.S. Malik, PVSM, AVSM (Retd.)

Background

"The countries that join globalisation with the right institutions and governance can get the best out of it and cushion the worst," says Thomas Friedman. He further argues, "The terrorists originated from the least globalised, least open, least integrated corners of the world. The countries that do not trade in goods and services also do not trade ideas, pluralism and tolerance."[1] India has always been a leader in ideas and thinking from the time of Chanakya and even earlier. Also known as Kautilya and Vishnugupta, he codified politico-social philosophy and organisation to run a state in his book *Arthashastra,* around the same time in the fourth century BC as Sun Tzu and Thucydides applied themselves to the great treatises, the *Art of War* and *History of the Peloponnesian Wars*, respectively.

Chanakya was perhaps the first exponent of the art of governance who laid out in detail the duties and responsibilities right from the ruler down to the common citizen, covering all state officials, traders and professionals of those days. He described three types of strengths: first, the power of deliberation as intellectual strength (knowledge); second, the possession of a prosperous treasury (economics); and third, a strong Army (military force) as strength of sovereignty (and martial power as physical strength of the king).[2] Extrapolating this to the circumstances of their time, Indians were able to spread their influence for over 15 centuries abroad, particularly in erstwhile Burma, and South-East Asia. The economic, as opposed to the military force, content must have been extremely strong, for the cultural and religious influence to have lasted this long and now become part of the common Asian heritage. This region and the wider world need to be vigorously addressed again, since economic security is dependent as much on interactions within as outside the frontiers of India. "In the post-cold war era, negotiations over even the most contentious disputes have moved from 'confrontation', to a higher plane of 'constructive contention'. 'Engagement' has become the new mantra".[3]

Which Measures and Why?

The measures to ensure India's economic security in the globalised environment applied to the present day geo-political circumstances would fall under three distinct areas, namely, economic, politico-social and military. The world has changed a great deal, mostly because of the interplay of these three factors. There are no distinct compartments anymore and changes in one area impinge on the policy decisions in the other two. Even the tools have acquired a great interchangeability, in that, economics is no longer a separate activity. It is now characterised as "soft force" which in itself is capable of achieving results, hitherto the sole preserve of "hard military force".

A GNP (Gross National Product) of $454.8 billion puts India 12th in the world, and 4th in terms of purchasing power parity (PPP) with $2,375 billion. China is number two, with $4,951 billion, ahead of Japan with $3,436 billion by way of PPP gross national income. However, the moment we bring in population into the equation, the PPP per capita places India at 153rd and China distances at 124th rank. The only country that is close by is Pakistan, at 160th. The Human Development Index (HDI) places Japan 12th and even China at 79th and India falls to 128th rank[4].

There has been progress since Independence, but there is a lot more to be achieved. Knowing that globalisation reduces poverty but increases inequality, must make us think about the politico-social factors. India is passing through troubled times where internal and external threats have placed a great demand on its security apparatus. Military strength works as a resin to keep disparate ethnic, social and religious groups together since these groups realise that they have much to gain by being part of a larger and stronger India. However, their attempt is to seemingly break away, strain the economic activity within, encouraging external forces to fish in troubled waters and prevent India from taking its rightful place in the comity of nations.

The often, easily ignored, military factor is possibly best explained by Ashley Tellis in a long-term scenario for India, where "the Indian economy experiences meteoric growth relative to Pakistan, both states enjoy relative political stability, and both develop a set of survivable nuclear capabilities, India will have reached a position from which it could provide a modified version of the traditional 'hegemonic peace'. Witnessed repeatedly throughout history, such peace essentially arises when a stronger state having no need to attack a weaker state, chooses not to attack it. The weaker state, being unable to attack the stronger, cannot disturb the peace either".[5]

An attempt has been made in this paper to discuss measures to be taken to ensure the economic security of India in the globalised environment, focussing on three major factors, namely, economic, politico-social and military. However, globalisation being a process and not an event, it has not always been possible to separate the influence of one factor from the others during some parts of the discussion.

Economic Measures

Most industrialists and some businessmen would have us believe that the policies of the government are all wrong and that the road to globalisation is fraught with great dangers, since India's economy is very vulnerable. What are the major steps taken by India towards globalisation? If the Indian economy is really vulnerable, then how have the macro-economic indicators reflected it so far?

Some of the important steps taken by us have been removal of the import restrictions, withdrawal of the Quantitative Restrictions (QRs) and reduction of tariffs from as high as about 300 per cent on some items to an average of around 30 per cent.

Are our external debts a cause of concern? Not really. The external debts stand at $ 94.4 billion. India was the 3rd most indebted nation after Brazil and Mexico in 1991. But now it is ranked 10th after Brazil at $244.7 billion, the Russian Federation at $173.9 billion, Mexico at $167.0, billion, China at $154.2 billion, Indonesia at $150.1 billion, Argentina at $147.9 billion, Korean Republic at $ 129.8 billion, Turkey at $101.8 billion and Thailand at $ 96.3 billion. The debt to GDP (Gross Domestic Product) ratio has come down from a high of 38.7 per cent in March 1992 to 21.5 per cent.[6]

The imports have also not surged ahead in any significant manner, and as a result, there is no large current account deficit. On the contrary, this is the first time in the last 23 years that we are having a current account surplus. This situation is not a flash in the pan one and if we handle our affairs prudently, it could even grow. Our FOREX reserves have grown to $62 billion from a paltry $ 5 billion in 1991. The latest trends show that the FOREX reserves are growing at the rate of $4 billion every four months. A similar increase in the mid-1990s took that many years, not months. Actual Foreign Direct Investment (FDI) in 2001-2002 was $ 3.9 billion.[7]

India has a history of easily slipping in the crucial economic security area of food due to natural and man-made causes. The famines of 1877 and 1942 amply reflected our food insecurities and yet the Food Grains Policy Commission, appointed for a food grains policy for Independent India, recommended abolition of food controls and rationing, emphasising the necessity of imports to maintain central reserves. Between 1957-58 and 1966-67, the Public Distribution System (PDS) became completely dominated by the imports under PL-480 from the USA.This came to be described by some economists like Sanjaya Baru as a "ship to mouth" existence. The Food Corporation of India (FCI) was created in 1965 to procure and import food grains and service the PDS as part of the Green Revolution package of the centralised food production and distribution system. Ironically, in 1991, the same agency, the World Bank, that got it started, called for its dismantling[8]!

The food sector has had maximum political interference where one cannot be sure of the actual situation. The food prices have gone up as there is pressure to increase the Minimum Support Price (MSP). But since the subsidies have come down, the poor cannot buy enough food. The government maintains that "excess procurement due to higher MSPs and mounting stocks of food grains, much above the level required for food security, have led to elimination of private trade and higher commitments for government subsidy".[9] Others maintain that the artificially created surpluses have encouraged the government to indulge in subsidised export. They argue, "Rich farmers and vested interests in government keep the MSP of food grains high—and prevent millions of people from rising out of poverty."[10] The truth as usual is somewhere in between. Unfortunately, all this debate obscures the actual priority of ensuring availability of food grains for our growing population to ensure economic security. "To ensure sustained and sustainable growth of food production and elimination of

malnutrition, forward looking policies will have to be pursued in infrastructure development, agriculture research and trade policy. Public investment in agriculture, especially productive investment in irrigation and new seed technology has been neglected over the last decade. Distorted pricing and trade, internal and external, have also discouraged productivity growth and suppressed rural incomes. In order to meet the target of 310 million tons (mt) food grain production by 2020 and 425 mt by 2050, average food grain productivity will have to increase from the present level of 1.7 tons per hectare (ha) to 3.0 tons per ha by 2020 and to 4.2 tons per ha by 2050. This is a stupendous task and requires both massive public investment in irrigation, rural infrastructure and bio-technology as well as pursuit of economic policies that shift resources from wasteful subsidies into productive investment".[11]

Energy is the key to economic security since all economic activity is so heavily dependent on it. Both the pattern of energy consumption and its demand have undergone a very distinct change over the years in India. Users have gradually, but steadily, moved from the traditional sources of energy to commercial energy fuels. Petroleum products are gradually replacing coal, which used to meet about 73 per cent of the industry's needs. The most startling changes have occurred in the transportation sector where consumption of petroleum products has shot up from 54 per cent in 1972-73 to 99 per cent. Consequent to similar change in the pattern of energy use in other sectors, the consumption of petroleum products has gone up from 57 million metric tons (mmt) in 1991-92 to 99.6 mmt in 2000-01, whereas the production has become almost stagnant at 33.87 mmt since 1996-97, coming up to about 32.43 mmt in 2000-01. This has created a gap and presently we need to import nearly 70 per cent of our requirement, which is likely to rise to 85 per cent by 2010 and 91 per cent by 2020. Our natural gas consumption is presently about 8 per cent of the total energy, accounting for a demand of 96 million cubic metres per day (mcmd). This is estimated to go up to 200 mcmd by 2007.[12] Present natural gas production in the country is 65 mcmd. The gas reserves found in the Krishna-Godavari basin off Vishakhapatnam by a consortium of Reliance Industries and the Canadian firm, Niko, are expected to be 105 mcmd and then go up to 150 mcmd.[13]

On 23 September 2002, at Osaka, at the International Energy Forum (IEF), the industrialised countries, with the backing of their Asian counterparts, tried to push the 11-member oil cartel of the Organisation of Petroleum Exporting Countries (OPEC) to force the price of oil down to

US $ 21 a barrel from the current level of $ 28 a barrel. The OPEC opted to leave quotas unchanged with the aim of keeping the oil price between $22 and $28 a barrel. Tatsuo Masuda, from the Asia-Pacific Research Centre, said oil price surges, as a result of supply disruption, could most effectively be moderated by oil stockpiling, but he added that many economies would struggle to afford this. Only Japan, Korea and Chinese Taipei maintain emergency oil stocks. Ten members of the Association of South-East Asian Nations (ASEAN), the European Union (EU) and India declared their intention to examine oil stockpiling.[14] China is reportedly considering it too, as an insurance for economic security.

The situation shows that economic security is a concern for everyone and the OPEC will address our concern only when we do not stand alone but are with the global groupings. However, the interest of these global organisations in India is expected to be directly proportional to their economic connectivity.

Considering that about 90 per cent of our energy demand is transported by sea and comes from many places on the rim of the Indian Ocean, our area of economic security interest far outstrips our Exclusive Economic Zone (EEZ) and the present area of influence. Apart from obvious economic implications, it throws up many military and diplomatic issues like safety of production areas at Bombay High and the Sea Lanes of Communication (SLOCs). The choke points in the SLOCs, responses to smuggling, piracy and Search and Rescue (SAR) missions in the Indian Ocean also constitute the elements important for Indian economic security.

Alternative sources of oil have become ever more important from countries like Iran, Myanmar, and Bangladesh. Even the gas from Tripura needs permission from Bangladesh for the 345-km pipeline through a land corridor. In fact, the pipeline for the natural gas from Bangladesh's Bibiyana fields could be made use of if the successive Bangladesh governments did not block the agreement. The pipeline routes to these countries would indicate that geo-political developments in these countries and the South Asian region would increasingly affect us deeply. The need for the development of our off and on-shore maritime assets is quite apparent but the enormity of the requirement suggests that we need to be more engaged in the areas which affect India's energy security.

History has put us at a crossroads, where our future economic and security requirements have become intertwined. The conclusion is obvious, that the Indian economy has to grow faster than the Indian population and its

aspirations, duly incorporating the cost of a secure environment in an increasingly globalised but turbulent world.

However, there is more to the energy sector than oil and natural gas. Rationalisation of the coal fields, clamp-down on the rampant corruption in mining and transportation, and breakdown of the payment between the state suppliers and the public users has almost turned this important national asset into a liability. India imported twice the amount of coal in 2000-01 (20.9 mt) than it did in 1994-95 (10.7 mt). Total electricity generation had gone up by only 163 billion KwH, till the year 2001-02 as compared to 1994-95, whereas the transmission and distribution losses have mounted to more than 25 per cent in the same period. In places like Delhi, these losses now stand at about 50 per cent! Writhing under the double whammy of losses and free distribution, most State Electricity Boards (SEBs) perpetually remain in the red. Our expertise in the nuclear sector is not reflected in power generation. Surprisingly, the good old hydel power, instead of improving generation due to better technology through public sector engineering giants, has shown a steady decline from 82.7 billion KwH in 1994-95 to 73.1 billion KwH in 2001-02.[15]

Massive investments, technology infusion, administrative reforms in power generation, transmission, distribution and taxation are required. Legal action needs to be taken against losses and non-payment of dues, to overcome the chronic man-made shortages. Indian industry deserves action in all these areas to unlock its productive capacity for economic security.

Clearly, in a dynamic globalised world, there is a requirement for equally dynamic planning and decision-making. With the passage of time, the cost of delays is bound to increase. As an example, despite liberalisation there has been no surge in imports because of the slowdown in the overall economy since the later half of the Nineties. If we do not plan to meet the natural aspiration level of the public, in the coming years, we may be faced with a large trade deficit, as imports go up faster when growth revives.

We also need to restructure the Indian economy to withstand the competition, anticipate future needs and meet them. The new foreign entrants in the Indian market, having the latest technology, stronger financial muscle and capacity to offer greater choices due to their worldwide network, have pushed out the Indian manufacturers from most of the Fast Moving Consumer Goods (FMCG), general consumer goods, consumer durables and even the transport sector. Long established industrial houses are turning into mere trading houses. We need more mature players, deeper markets and more institutions built at various layers and levels. There should be more informed regulatory bodies, from telecom to non-banking financial companies (NBFC), insurance and the stock markets, to curb excessive speculation, bring in transparency and allow proper flow of information to all players.

Stephen Cohen, quoting K.M. Panikkar says, "India has been characterised as a civilisation in the possession of a bureaucracy" and it became abundantly clear during a recent study on "the impediments to investment" carried out by the Federation of Indian Chambers of Commerce and Industry (FICCI). The study concludes that there are more problems being faced at the state/local level. A faster resolution is impeded because the states and below levels have jurisdiction over areas like land, licences, electricity, water, tax, labour clearances/approvals and inspections which add up to 70 per cent of the total investment and start-up activity. The Centre only clears issues like Foreign Investment Promotion Board (FIPB) approval, enhancement of share capital, allotment of shares to international headquarters and registration by the Registrar of Companies (ROC) which amount to about 30 per cent of the process to start and run an industry. These clearances and approval processes lack transparency and defy the systems approach, often due to contradictory rules, which impede parallel processing. Clearances and approvals take from five days to a year, totalling from 3,456 man-days for a small to medium enterprise (SME) to 2,995 man-days for a large scale manufacturing organisation.These institutional, organisational,legal, political, administrative and attitudinal impediments erode the vitality of the economic process and threaten the economic security. These procedures create an environment of uncertainty. It is always difficult to know if these are being placed purely due to "rent-seeking" or political purposes or intentionally to sabotage the economic activity.

The measures suggested are decentralisation of implementation matters to the state by vesting the responsibilities for investment projects with them. The Centre should focus only on policy and broad, legal framework issues. Clearance should be given in a time-bound manner and a method devised to monitor the progress of the projects. There is a need for simplification of administration jurisdiction, greater legal and procedural clarity by making the procedures and applications available on the Net and publicising it. Inspections should be combined and a "Strategic Management Group", chaired by the Chief Secretary, created in the case of projects above Rs 100

crore, must be established in the states, to review projects once in three months[16].

Many economists have taken an optimistic view of the future, based on the recent decision to give more teeth to the Securities Exchange Board of India (SEBI), splitting of the Unit Trust of India (UTI), reduction in the bank rate by the Reserve Bank of India (RBI) to 6.25 per cent, and the Anti-Theft (Electricity) legislation introduced in Andhra Pradesh, Maharashtra and West Bengal. Tarun Das, Director General, Confederation of Indian Industries (CII) feels, "Infrastructure development as a public private partnership is happening. But problems will continue. Paying for infrastructure services is a recent phenomenon. Five years from now, this will be history. Regulatory authorities are in their infancy and experiencing the pains of growth. It will not be a nice smooth ride because this is one huge change and we have to give incentives for honesty. We have to start with simplifying all kinds of taxes, and happily there is a process underway".[17]

Politico-Social Measures

Defining the Indian social churning, Stephen Cohen says, "Evidence from those states whose internal social revolutions are well advanced (Tamil Nadu and Andhra Pradesh in the south and West Bengal in the north) suggests that this highly stressful and often violent period evolves in a certain pattern. First, new groups stake their claim to political power, challenging the existing political order. Second, the dissatisfied (or outnumbered) may seek help from their internal and external diasporas. In some instances (Punjab, Nagaland, and Kashmir), dissenting groups seek help from foreign countries. Tamil Tiger hit squads were used in Tamil Nadu politics to settle old scores. The politics of Tamil Nadu, Sri Lanka and New Delhi became tragically intertwined; these social revolutions have contributed to greater violence and insecurity among high and low castes alike. At times this has created a fertile environment for organised crime syndicates, complete with Godfathers and Mafias carrying light weapons and organised into private *senas* or armies. In some states, it is difficult to separate the politicians from the criminals. According to one recent report, more than 200 of India's 535 districts are experiencing insurgency, ethnic conflict, extremism, caste clashes and other crises. Of the 69 districts in the north-east, 48 are affected by insurgency and ethnic violence".[18]

All the ills listed by Stephen Cohen have not made our system crumble but it cannot be denied that we have constantly been paying heavy opportunity costs, proving what Mr Winston Churchill, once said, "Democracy is a flawed system but others are far worse". We can argue *ad nauseum* about it, but the recent J&K elections have shown that even the considerable, money, muscle and manipulation (M^3) power of our neighbouring country could not curb the free choice. In a globalised world, nothing remains hidden. No evil act can be justified on domestic, personal, or political counts. It gets reported instantly and the echo resonates in the boardrooms of companies around the world. The dollar is often quoted as a coward and it does not flow to the regions where the rule of law is in doubt.

Swaminathan Aiyer feels democracy creates a market for political goods and capitalism creates a market for material goods. Here also, rival business houses try to curb "free choice" by innovative advertisements and accounting, creating an illusion of prosperity, use of black money, hiring of goons and hiding profits to obviate passing them on to the consumers. Globalisation is the natural evolution of capitalism because of the revolution in transportation and information technologies. It allows us the "freedom to choose" which gives ordinary citizens tremendous power through shifting of "votes" in democracy and shifting of "custom" in globalised business.[19]

However, for the ability to make that "custom" a force, there has to be prosperity for which governance has to improve. The legal system must not be beholden to the people with deep pockets or connections. The Human Development Index (HDI) has to improve, so that an investor is reasonably assured of labour availability of the right kind before he puts his capital in or is encouraged to bring in cutting edge technology.

Mr Robert Blackwill, the US Ambassador to India, has said, "The value of democracy and free market are mutually reinforcing.The need of the hour is consistent implementation of the policies. The most decisive decisions regarding globalisation occur in the private sector, in millions of daily 'choices' far beyond the reach of *babus*... For India, the present calculus on the part of international investors is obviously not heartening. References to the past Indian economic achievements will not change that fact... potential US investor told me that Indian taxes and tariffs are high and there is too much government interference over business decisions".[20]

Mr Robert Blackwill felt that a strong and globally competitive Indian economy is in America's strategic interest. We need to appreciate this fact now and here, since we missed such a congruence of interest once earlier

after Independence. We must now not be seen going it alone by default, due to delays caused by the domestic situation or political compulsions, following inconsistent foreign policies, thus, compromising our economic security yet again.

Globalisation in many ways strains the governance because of the creation of inequalities inherent in its implementation. If the politico-social system were not robust enough, the fissures would get accentuated. No nation can be called secure if its people do not have assured access to primary health, education, justice and gainful employment. Taken together, this "human security" becomes the cornerstone of economic security. Minorities cannot be ignored even if an ethnic or religious minority is not large enough to make a dent in the political equation. The worldwide flow of information and ideas simply does not allow anyone to be isolated in the globalised world.

There is a cyclic relationship between the growth of population, the rise in its aspirations and the need for growth in the economy and a consequent greater security requirement for the country. New technology in consumer goods and services may push up the aspirations of the people and increase their numbers, as fewer people would die, due to improvement in the health services. Newer technology in defence could easily push up the bill for a secure environment, as would internal and external conflicts. A faster growth of the economy would push up energy needs but newer technologies of future consumer goods could also cut down the energy needs to manufacture the future products and could easily fuel the search for newer raw materials not available in the country.

Global environmental concerns and the requirement of the World Trade Organisation (WTO) could give a different spin to the demand and supply cycle. In an interdependent world, with the increasingly mobile population of tomorrow, it is not only what could be happening in a country, but what is likely to happen in another country, that must now be taken on board for planning. AIDs spread, nuclear accidents, major oil spills, major destruction of forest wealth or harnessing of glaciers/rivers by any country cannot now be said to be a totally internal affair of a nation-state. It is not difficult to imagine that a future scientific breakthrough in energy sources, space, sea, or basic raw material of various agricultural and industrial activity would not make some countries extremely rich or poor in a comparatively short time. The interesting aspect now is that the push to the cycle discussed above can come from breakthroughs in the economic, politico-social or defence sector, with spin-off advantages or disadvantages, conveyed worldwide through the modern media, demanding early adjustments.

The brighter side is that the technology is not always part of the problem; if harnessed in time, it can be part of the solution as well. Quicker flow of information, transparency and quick responses by the administration, one-window clearances, access to information, speedy disposal of legal cases through computerisation and status report on call are not luxuries but the requirements of tomorrow's public. We need to harness technology to enable the medical services to treat through remote control, and eliminate delays, frustration and remove inequalities endemic to globalisation and, thus, strengthen economic security.

Military Measures

Since India achieved independence largely through peaceful means, there has been an inadvertent marginalisation of military matters. Though the situation did improve after the unfortunate loss of face during the Sino - Indian War of 1962, the Armed Forces did not quite get integrated in the decision-making loop of the nation. India did pass through an intense phase of military activism in the 1980s but it ended with "Operation Pawan" in Sri Lanka. Accordingly, the defence expenditure, having risen to 4 per cent of GDP in 1986, dropped to 2.44 per cent in 1993-94. An RBI report reinforced the political view held all along, by attributing the balance of payments crisis to the arms imports during the late 1980s! It is worth considering how come we were not able to take any economic or diplomatic advantage, howsoever indirect, from such massive transactions, and instead landed in a political disaster while buying arms at that scale. The weapons were not always the best, and many had to be shipped back to the Soviet Union for repair or reconditioning since technology transfer was not, or could not be, negotiated. We had the weapons but not the expertise or the capabilities to produce them[21]!

Since the end of the nineteenth century, the defence industries have been regarded as clearly defined national assets, supported by national governments. But the globalisation process is creating or accelerating the emergence of transnational defence markets and corporate structures."National" defence industries, especially in Europe, have already been diluted by international collaboration to develop specific projects. And the operation of international supply chains and Foreign Direct

Investment in national defence companies is increasing the level, depth and complexities of global industrial integration.[22]

The Government of India's Ministry of Commerce and Industry, Department of Industrial Policy and Promotion SIA (FC Division) came out with a policy on "Guidelines for Licensing Production of Arms and Ammunition" at the beginning of this year, aimed at promoting FDI in the defence sector.[23] It is hoped that this lead by the government would be followed by the industry and some more initiatives would be taken by the government to let the industry know about the scale, so important for any long-term financial commitment, and ensure that advantage is taken of the globalisation of defence industry. The advantages of the defence-led strategy of economic growth even in limited sectors, would give a significant push to Indian R&D and consequently improve India's economic security.

We must appreciate the spin-off effects the R&D for the defence industry has been having in the West. In the USA, it is their virtual engine of economic growth, employing 38 per cent of all physicists, 22 per cent of all electrical engineers, and 20 per cent each of all technical, mechanical and metallurgical engineers in the country. Additionally, defence spending accounted for a whopping 48 per cent of all aeronautical engineers![24] Consequently, the USA not only gets the "best bang for the buck" but also the "mega buck for the economy" from defence.

An area in India where interest is slowly getting generated, as we see by reports, is in a world class Victor motorcycle, developed indigenously by TVS Motors. The Indica, also by the Tatas, has reportedly beaten all competition in its class, taking advantage of the liberalisation policies and sub-contracting some design jobs abroad, following the global practice. Bajaj too has developed a new range of motorcycles in-house.[25] It may not be widely known that India has had substantial expertise in ship-building, but sadly, instead of taking the spin-off advantages for the commercial sector, we have slowly lost some expertise in the absence of substantial orders from the Indian Navy. It is important that we build on the technological base that we have and encourage innovation and excellence. This would require overhauling the education system for it to encourage enquiry, and reward merit. It is time we began to question why so many entrepreneurs leave India, like Shaam P. Sundhar from Mysore. This intrepid inventor taught electronics for 26 years, quit four years ago, and is now committed to invent consumer goods with minimum power usage. Leaving India for the USA in 1969, he now holds 10 patents for products ranging from bulbs and fans to air conditioners.[26]

We do have a tradition of the defence-led strategy of economic growth in the electronics industry. It is ironical that at a time when our IT (Information Technology) industry is leading the growth, the defence IT products are not yet produced indigenously in any significant manner. "The integration of commercially developed software into defence systems would, for example, afford opportunities for the Indian software industry indirectly to become part of the world defence industrial system".[27]

"India's diplomatic and strategic planning processes do not maximise its assets. The decision-making system requires a thorough overhaul. There has been considerable talk of introducing a new and efficient system for nearly two decades, but to do so, India will have to overcome the power of entrenched bureaucratic interests, the marginalisation of the armed forces, and the overwhelming demands of domestic politics."[28]

Initiatives taken by Mr Jaswant Singh for better coordination between the military and civilians, and modernise the Indian higher defence organisation by proposing to appoint a Chief of Defence Staff (CDS), and a system that hears the CDS, should be continued. Many good things happen in India by default. It was perhaps providence that Mr Jaswant Singh held both the Foreign and Defence portfolios for a while. It was perhaps the best thing that ever happened at a most crucial time, allowing us to harmonise our policy response in the wake of the 9/11 events. Presently, his initiatives appear to have got stalled. So far, it has resulted only in creating an Integrated Defence Staff (IDS). Unfortunately, the entrenched interests have reduced it to being an extra headquarters, apart from the three Service Headquarters outside the Ministry of Defence (MoD).[29]

Even in procurement, "the Defence Ministry has woken up to the fact that the mere creation of a Defence Procurement Board (DPB) will not bring about speed in defence acquisitions unless backed by concrete measures. The existing procedure with over 50 clearances steps, really bogs down decision-making"[30] All this, after the efforts of the Group of Ministers (GOM) in the wake of the Kargil report. There are now reports of an overarching system being created to address the problem but it does not talk of any other Ministry to consider the advantages to the economy. It would, thus, appear that even the economic activity generated by substantial and almost regular procurements may not allow deeper economic linkages and, hence, deeper security for the country!

We have inducted only one Joint Secretary from the Indian Foreign Service (IFS) in the MoD after about 43 years of independence. The result has been that most arms purchases, sales, border disputes and treaties with international implications, unnecessarily become an excuse for the clash of egos between the Indian Administrative Service (IAS) (of the MoD) and the IFS, with the Services watching helplessly and suffering the consequences. They both have their special background-based areas of expertise, as do the Services and the IAS in the Finance Ministry. With unit cost of defence items and wrong treaty postures increasing exponentially, all of them need to get into the act, in a "collaborative" and not "combative" manner, to save their turf. Further, whenever "buy" and "make" decisions have to be taken and the Defence Research and Development Organisation (DRDO) is called, we must also call the representative from the relevant Chambers of Commerce, to bring in the cost effectiveness angle for more rational decisions. Since monetary aspects are always huge, but not immediately apparent, the economy is quietly depressed along with the facts of such deliberations, all in the name of national security.

We are perhaps the only country of any consequence where Defence and Foreign Affairs are not considered two sides of the same coin. Of course, a lot of lip-service is paid to the idea. But it is only in India that the Service Chiefs are generally not part of the negotiating team even with the countries that have military regimes or where the military has a substantial say, and those selling arms as part of wider negotiations. The Service Chiefs are generally seen at the guard of honour, the banquet and at the time of arrival and departure.[31]

Conclusion

Though the Botchway Report prepared for the IMF (International Momentary Fund) reportedly contains all the mistakes made in the structural adjustment programmes, it is argued by eminent economists that policies are "path dependent"; the history of economic development, of institutions and of policies, determines how the new policies are affected. There is no universal, no single method of changing the macro-economy or the budget, no uniform pace of trade and investment liberalisation. Reforms have to be designed specifically to suit the context of the economy.[32] Actions need to be taken in the process to ensure that our economic security is not compromised by following the wrong models. We have to find our very indigenous Indian solutions to suit our local genius, mostly relying on our own resources, raised by us, including the Indian diaspora, and supplemented by foreign investment.

We also need to be proactive in the region economically and not wait for, but create, openings. It may be worth remembering that our image in the region is that of an assertive power, and like China, we need to change it. It may not be very well known that China quickly went to the help of Thailand in the wake of the 1997 financial crisis with a bailout fund, in contrast to the US, which imposed stringent IMF conditions for the same purpose. "It is not surprising that China's dynamic economy is being seen as an engine of growth for the region".[33] The key word is engagement, not necessarily militarily.

A growing economy has the potential to give wherewithal to the foreign policy that has long been high on rhetoric but short on economics and, thus, military resources. The coercive policy followed against Pakistan would not have been possible if we were not comfortable with the resources, as compared to Pakistan. In the mid-Eighties, a similar proactive stance deeply affected our economy.

The annual growth of the economy of the globalising camp is reported to have been 1 per cent in the 1960s, 3 per cent in 1970s, 4 per cent in the 1980s and 5 per cent in the 1990s.[34] Our economic growth has to be more than that so that we can absorb greater investment, develop and employ the latest technology, remove the inequalities inherent in the globalised system, empower our people to realise their potential and reposition ourselves in the world of tomorrow through the necessary but possible changes in the way we do things in India.

There is a lot happening under the surface in India. The old system is giving way to the new coalitions of caste and region. The emerging assertive federal system has its strengths and weaknesses and, above all, it has yet to settle down. There will, thus, be attempts to test the resilience of the national constitutional institutions, as we saw in the case of Gujarat and Karnataka. The future course will be decided based on the outcome of such encounters. A similar trial of strength has been going on in the corridors of power, where the Indian Armed Forces have so far not succeeded in getting sufficiently noticed. Consequently, they have been losing ground. Fortunately, events like Kargil traditionally balance the equation but we cannot wait for Kargil to happen every day. The industry and the Armed Forces must come closer to understand the dynamics of economic security and make it happen for mutual benefit.

Stephen Cohen has noted that "India lacks an integrated system for allocating resources; decisions in this sphere remain in the hands of the civilian bureaucracy, except when a particular lobby is able to attract the attention of powerful politicians. Because of the antipathy towards the private sector, the defence science establishment has been sheltered from competition, and the exaggerated requirements of secrecy have screened it from effective cost benefit analyses. This sector remains highly bureaucratised, leaving Indian science and technology lumbering along."[35] In the process, possibly, the Indian industry has been deprived of a likely powerful engine of growth, weakening our economic security.

Lastly, what the so-called hyperactive, intrusive and, thus, powerful media catches and puts on the screen tirelessly are the ripples on the surface, the noises of our democracy. It has neither the incentive nor the time before the next bulletin, to catch the action below the surface, the furious pedalling underneath, what Nobel Laureate V.S. Naipaul has called "A Million Mutinies Now". Indian economic security lies ultimately in its land and the people, specially the youth. There is a requirement to tirelessly invest in both,to enable and empower for a secure economy.

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Discussants

Dr Sanjaya Baru

Both the speakers have covered all the issues very comprehensively. I was just telling Mr Jairam Ramesh that every single issue that he has raised finds mention in the chapters of the economic security report of the National Security Advisory Board (NSAB). We had hoped that those reports would be made public. The government in its wisdom(or lack of it) has so far not published those reports. I feel those are the kinds of reports that need to be in the public domain. The President of the USA had put his paper on national security on the Web. One can go to the Internet and actually read it. I do not see why we in this country should shy away. But for those of you who have not had access to that report, you have heard what it says, more or less whatever Mr Jairam Ramesh and Lt Gen. B.S. Malik have said this morning. These are all critical issues. Governance, capability building, increasing investment, particularly in manufacturing, good financial management, prudential management of the external sector, increasing revenue to GDP ratio and a series of specific ideas have been reflected. I agree with the basic thesis that there is a different set of issues when we look at external economic security and a different set of issues when we look at internal economic security. And, of course, there is a link between the two, particularly with respect to the way we manage our finances, because there are external implications of internal financial management, as well as the way we manage manufacturing and agricultural capabilities, because unless the internal economy is competitive, it will not be able to engage externally with the rest of the world. Therefore, while the issues are very different, one can make the statement that Jairam has made, that in the external sector we are more secure because of our low debt to GDP ratio and low current account deficit. In fact, now we have a current account surplus because of the exchange rate stability and a variety of external indicators like high foreign exchange reserves. While one can make the statement that on the external side we are not vulnerable, and, therefore, secure, there are, however, problems of internal management which make the economy less secure. One must recognise the fact that internal mismanagement of the economy can have an external dimension. It can do so directly, as you have seen in Latin America, particularly in the case of Brazil, where domestic debt created problems of insolvency and, therefore, resulted in an external payment problem for the government. It can have serious repercussions for exchange rate stability, for inflation, and management of social stability. We have seen the whole gamut in both Brazil and Indonesia where internal insecurities had major external implications. But there is a more enduring way in which the internal mismanagement of the economy can impinge on the external security of the country and that is by disabling or constraining a country's industrial and manufacturing competitiveness, and competitiveness in dealing with the outside world. The first proposition that I would like to put forward is that the key challenge for any country, and more so for India, is in managing globalisation, that is, linking economics to globalisation and almost everybody I heard yesterday and today said that globalisation is a process of integration of the world, of the economy, and we are very much a part of the process. So, given that there is a phenomenon called globalisation, and increasing economic integration, the challenge for us is our economic security and how to manage it and acquire the ability to deal with globalisation.

The first important principle or feature I would emphasise is capability building, and these capabilities are wide ranging: there are managerial capabilities, political capabilities, technological capabilities, and human skills. It is capabilities building that distinguishes a country that is unable to cope with the pressures of globalisation. Often, we compare ourselves with our major neighbour, and in a sense our major rival, and challenge, which is China. The distinguishing feature, apart from the political system, is China's ability to have invested in capability building in the last three to four decades. We still lag behind in this.

The second feature is infrastructure building. Infrastructure is very much capability and capacity building at the economy level. We have to make

these internal investments in capabilities and capacities. Where we have made these investments, we are able to deal with the challenge of greater economic integration which is what globalisation is all about.

In Jairam's presentation, he made a very pertinent point which is that one of the reasons why India has been able to better manage its transition from being a closed economy to an open one is because our process of liberalisation has been gradual. But this is not something that happened automatically. Those of you who are familiar with the debates that took place in the 1980s and 1990s, know that there were alternative schools of thought. There were people who had advocated "big bang" reforms. In fact, that is the model that Russia followed. The problems that the Russian economy had, according to analysts, were due to their pursuit of the big bang reforms. The same is the case with Argentina, Thailand and Mexico. One of the reasons why we were able to avoid the pitfalls of the process of globalisation in the last decade was because our response was graduated. I was most heartened to hear Jairam mention about capital account convertibility. Because when he was advisor to the Finance Minister, his boss was very enthusiastic to go in for capital account convertibility in the 1997 budget—the "big bang". He had to be held back. With hindsight, we know that it was a wise decision. If that had to come (as it was planned in the budget of February 1997), the Indian economy would have got adversely affected. The Thai crisis broke out in July 1997. Between July and October 1997, we had a domino effect in East Asia. First it was Thailand, then Korea, then Indonesia, then Singapore—a series of economies got into trouble. Both speakers are also right when they say that we have not had the same focus when it comes to domestic policies. There are great vulnerabilities in the way we have managed the domestic economy. These vulnerabilities have been elaborated—one fundamental vulnerability is in the area of capabilities. Where we have the capabilities, we are able to deal with the challenges of globalisation. Where those capabilities are missing, the answer is to build those capabilities. But those challenges are in the financial realm of the domestic economy. Almost everything discussed this morning points to the need for a better system. The ideas about fiscal deficit management—increase in the revenue, increase in the revenue to GDP ratio, making the public sector and investments more productive, making State Electricity Boards (SEBs) more efficient, and so on—are important and necessary to improve the ability of the economy to deal with the challenges of globalisation.

In a nutshell, one could say that ultimately the answer to the problem of globalisation is better governance. If you are better governed, across the board, to include financial governance, public sector governance, governance in the education system, governance in the political system, and so on, better management of globalisation will also be facilitated. The challenge to policy-makers is to see how to translate the suggested solutions into practical policies concerning increase in the revenue-GDP ratio, increase in productivity of the public sector, increase in trade competitiveness, increase in the network of roads and railways, and so on. The economist's job ends by listing these challenges. Then we move into the realm of political economy, because the challenge then is to be able to translate this. There are only two economic slogans that have moved the millions in this country. The first slogan given to us by the leaders of the freedom movement like Tilak and Gandhi was *Swaraj* (self rule). *Swaraj* certainly moved people, it motivated a lot of effort, it enthused business enterprises into investing in various areas, all the way from ship-building, automobiles and textiles. The early process of industrialisation in this country, the building of research and academic institutions, Indian Institutes of Technologys (IITs) and universities all of that was motivated by this desire to build an economy that was self-motivated and self-reliant. Therefore, *Swaraj* was certainly an economic slogan as much as it was a political one.

The second economic slogan was *Garibi Hatao* and that was in a sense a response to the inability of the economic policies of the 1950s and 1960s to address the problem of poverty, inequality and unemployment. That also motivated people politically into accepting all kinds of policy ideas.

I am afraid we have not found the right slogan in the last decade or so to push through sensible and relevant policies necessary to strengthen the country's finances and economic competitiveness, without which we cannot manage the challenges of globalisation effectively. I was quite amused to see the Deputy Chairman of the Planning Commission put in an advertisement calling for suggestions and a slogan for the 10th Five-Year Plan. And in a lighter vein, we could have said that since Mr Jaswant Singh, the Finance Minister, had said that his challenge is *gharib kai pait main ann dalna* (to have grain in the stomach of the poor), *pait kai liye eight* (eight for the stomach—eight being the target for the average rate of growth of the 10th Plan) may be an appropriate slogan. The challenge in terms of political management is how to translate these sensible ideas into politically saleable ones. Certainly, I believe one way of doing this is to constantly draw attention to the manner in which the pursuit of many of these ideas has strengthened our political national rivals. This is one way of doing it.

Arun Shourie did it when he delivered the Field Marshal Cariappa Lecture last month. He drew attention to what China is doing. He suggested that this great challenge which India faces from China is not a military challenge. On the military to military level, India is today perfectly capable of taking on the challenge that China poses. We are no longer in the situation that we were in in the 1960s. It is an economic challenge because China is increasing its trade and economic engagements with every country in our neighbourhood. From Iran in the west to Japan in the east, you take every single country in this huge Asian landmass, the economic engagement of China is increasing at a faster pace than the economic engagement of India. That is the central challenge for this country. The link among national security, economic performance and globalisation—Jairam correctly distinguished between globalisation at the global level and globalisation at the regional level. But the regional level is just not SAARC. With SAARC, we can strut around as the biggest economy. But within the Asian neighbourhood, we have engaged with for thousands of years as a successful civilisation and the home of ideas, including religious and philosophical ideas.

We look at globalisation as a threat because we see it within the paradigm of old ideas of external dependence. Certainly, 200 years of colonialism was a period when engagement with the outside world was one of dependence. The policies we pursued from 1947 onwards for 30 to 40 years were policies that tried to reduce this dependence on the outside world because they came in response to colonialism. But, today, we need to understand that the solution to the challenge that China poses is, in fact, to increase our mutual interdependence. That the Chinese become as involved in our success as we become involved in theirs. This relationship of trade,of investment flows, of economic interaction is what builds relationships of security and that is precisely the message of China. If somehow we can translate this into a popular political message, we might actually get the people of this county mobilised to accept the rational ideas that we have discussed this morning.

Ambassador S.K. Bhutani

Implicit in the theme of the seminar is the belief that "globalisation" represents an unwelcome challenge to India's prosperity and well-being. Is this really so?

I think globalisation is basically a consequence of progress in science and technology, which has gathered pace since the beginning of the last century. Initially, it became visible in the defence and military security arena, the development of weapons of mass destruction, of the means of their delivery, the use of space for communications, marking a qualitative shift in the global security environment. India responded to this development over a period of time, consistent with its overall interests.

In the economic field, application of new technologies led to globalisation of production, of markets, and to the rise of truly global corporations as distinct from multinational corporations, in the financial, industrial, marketing and related fields. The WTO came into being to regulate this process and in doing so, went beyond international trade. In the negotiations leading to its creation, the negotiating parties raised issues of intellectual property rights, investment climate, etc, in effect it sought to include in its purview all fields related to economic activity.

In discussions related to the WTO, it is assumed that the organisation was meant to dispense equity and justice. While these laudable principles may find mention in the preamble to a treaty, the provisions of the treaty usually represent the existing balance of interests and advantages accruing to the signatories to the treaty. If a treaty should fail to reflect this balance, it will be scrapped or modified to reflect the changes. By and large, members of the WTO have found the organisation useful. Non-members like Russia seek to join it. China has just become a member after decade-long negotiations. What is China's approach?

China wants not only to be a global workshop, it also wants to be a global centre of research and development and the regional headquarters of global corporations or conglomerates. To achieve this, it has shown willingness to change. In the 1980s, it set up "town and village enterprises", which attracted much interest as a means to harness resources for higher industrial production. By 2002, these have been supplanted by "foreign investment enterprises". The latter enterprises, which contributed only one per cent of Chinese exports in 1985, were responsible for 50.1 per cent of a much higher value of Chinese exports in 2001. In discussing China's economic performance, reference is usually made to the near-bankrupt state of China's government-owned banks and the adverse influence that this could have on China's future stability. In this context, it is useful to remember that taxes which formed 10.7 per cent of China's GDP in 1995, have risen to 17 per cent in 2001. In India, this ratio has fallen from just above 10 per cent to just below it!

The Chinese have serious differences with the United States. The future of Taiwan has been an issue for five decades. They disagree over the issues of missile defence, missile proliferation, US military presence in East Asia and lately in Central Asia, etc. Despite these differences, the trade and investment relationship with the US has grown exponentially.

India need not copy the Chinese practices, but can certainly draw inspiration from its positive and forward-looking approach. However, it seems Indian policy-makers are paralysed and unable to act even when they know what is needed. It is the political arithmetic which prevents adoption of rational solutions. For instance, provision of subsidies is a major issue. Farmers, traders, exporters and other politically powerful entrenched interests have benefited from these subsidies, and continue to do so. With falling tax revenues and increasing subsidies, there is progressive lessening of resources available for health, education and job creation. These and other social services are the glue which binds the citizens to the state. Non-availability of even minimal social services leads to alienation from the state and can result in insurgent and terrorist activity. Pakistan is blamed for insurgency in Jammu and Kashmir and rightly so. But if we do not address the basic malaise, someone else could take advantage of it.

There is a crisis of confidence in the functioning of the constitutional apparatus. The Supreme Court decided on some measures to bar criminal elements from getting elected to the legislatures. The Election Commission formulated guidelines to implement the Court's decision. This was nullified by an ordinance issued by the central government. The issue is back before the Supreme Court. If you recall, the Lok Sabha found it desirable and possible to expel Mrs Indira Gandhi from the Lok Sabha for her actions during the 1975-77 Emergency, the period of the preceding Lok Sabha, so it is inexplicable why the legislature will not expel from its midst a person convicted of criminal activity.

It is this crisis of governance which inhibits India's ability to meet the challenge of globalisation effectively and enhance the well-being of its people. This should not imply any doubts about India's ability to do so. For instance, another crisis in the Persian Gulf is in the making, if not already upon us. The price of oil is already higher than the demand-supply situation warrants. What is India's situation this time? In the early 1990s, India was forced, like a drought-stricken farmer, to pledge its gold reserves and ship them to the Bank of England as collateral for loans made available. In 2002, there are no signs of the flight of capital that took place on the earlier occasion. The foreign exchange reserves are increasing at a rapid pace. The Reserve Bank of India is able to continue reducing interest rates at home, invest abroad, and liberalise availability of foreign exchange to citizens and corporations alike. On top of it, the rupee has gained in value against the dollar. Today, the issue is not the survival of the Indian economy as before; it is the rate of its growth.

General Discussion

Captain Batra

Question 1. This is regarding the external and internal debt. I understand that both the debts that the government owes are mostly due to 25 per cent of the creamy layer. I also belong to that 25 per cent. If that is so, then how does this *lakshman rekha* (threshold) of external debt and internal debt affect the balance 75 per cent? I do not think many suggestions have been made as to how those 75 per cent are going to pay the debt incurred for the 25 per cent. Shri Jairam Ramesh wants to deprive people who have retired from government jobs of their pensions, which are also deferred wages or a debt that the government owes.

Question 2. This is to Mr S.K. Bhutani about the WTO. It appears that there is an impasse in the WTO due to the non-implementation. The G-8 powers are going back to regional free trade areas. This was one reason for World War II. India is the affected country in this system. India seems to be trying very hard. Is it going to succeed in the regional free trade area so that we can strengthen our bargaining power in the WTO? Yesterday, the High Commissioner of Australia offered some sort of long-term tie-up. Nobody has taken up her challenge.

Brigadier Mehra

Firstly, we have been talking in terms of revenue collection, etc, and also about the pensions of those people who have worked and produced something. Instead of trying to tackle them, why not tighten the belt of the government? Today, we have no shortage of Generals, no shortage of

Secretaries and Additional Secretaries, no shortage of thinkers, and no shortage of seminars. But there is no doer. This is one aspect where the requirement is to implement policies into action. What do we do about this?

Secondly, in globalisation, we need to encash on the opportunities. If we do not do that, we will be doomed. It is said that we have surplus food, but some poor people do not have the money to buy it. It is not the pensioners who are bleeding us, it is the service class and the government servants who do not work properly, who are responsible for poor governance and poor output. In the ordnance factories, out of 10,000 workers, not more that 100 work. What should we to do about that? The opportunities that are with us today, if exploited, can reduce our defence expenditure substantially. With due apologies to all senior thinkers, I would like to state that a powerful and rich country like the USA went to the UN so that it could control terrorism. Then the USA smashed the Taliban. We are still sitting quietly, having fought terrorism for the last 15 years, with all our resources diverted towards defence and not development. We have only been thinking, but have done nothing. Why is that we cannot go to the UN—the way the USA goes about it—take help from them and smash the terrorist camps in Pakistan, which is the epicentre of terrorism? If we do that,our expenditure will come down.

Wing Commander Saluja

My question is for Shri Jairam Ramesh and Shri Sanjaya Baru. The problem is the bad governance and vested political interests. The solution which emerged, as brought out by Mr Baru, is a political slogan. If the political class cannot coin a political slogan, I suggest the USI start a contest to coin one.

As has been brought out, the bureaucracy is an obstacle in the developmental process. The service sector is also growing. This sector does not belong to any group or vote bank, and is developing on its own. Other developments, like in the public sector, are based on vote bank criteria. What are the views and solutions of Shri Jairam Ramesh and Shri Sanjaya Baru to the problem of the bureaucracy in India and its role?

Commander Radhakrishnan

Ambassador S.K. Bhutani mentioned that we are doing well vis-a-vis the dollar. Fifty years ago, the pound was just over Rs 13 and the dollar less than Rs 5. Today, it is Rs 70 and Rs 50 respectively. Is this a good thing that the Indian rupee has been devalued to this extent?

Brigadier C.B. Khanduri

First Question. We are not getting to the root of the problem, which is corruption. If the government turns a blind eye to this, then the country cannot progress. Nothing moves without greasing palms. The retired community is also the victim of corruption in day-to-day life. In a recent gathering in the Nepalese Embassy, before the Chinese Ambassador could reply to a question regarding the phenomenal progress by Communist China and what we in India should do, someone commented on India's lack of discipline, its corruption, and so on. I request that this should be addressed and practical measures suggested.

Second Question. China's challenge to us has correctly been identified as an economic one. There is a need to consider strategic triangular collaboration among India, Russia and China. This would be beneficial to the region and would also contain the lone superpower, the USA.

Shri Jairam Ramesh

Internal and External Debt. An internal debt—that is, a public debt—is incurred by the government borrowing. The government is going to the market to borrow money to meet its expenditure. Somebody else could be doing that borrowing and investing based on that money. What is happening is that the government's appetite for borrowing is actually preventing a more productive agent coming into the market and using those resources for investment purposes. This is what economists call "crowding out". What happens is that the phenomenon of internal debt (unlike in the case of external debt), has far greater deleterious consequences on investment. This is because governments borrow from this pool of savings and resources. So what is happening in India is that because of the increasing appetite of the government's expenditure, and because the government has resorted to borrowings, basically to meet the revenue expenditure gap, you have crowded out a large number of players from coming in and raising that money, and using it for investment purposes. So productive investments are not forthcoming, because the entire pool of resources is being preempted by the internal debt that is being built up by the government. This is fundamentally different from external debt in which you are not too worried about the consequences at the domestic levels.

Pensions. There is a large number of questions on pensions, may be I should be a bit diplomatic in answering them. The fact of the matter is that payment of pensions is killing the economy. It is not so much the pensions as the nature of the pension system. As you know, we have a fully unfunded pension system. The nature of the pension system in India leads to fiscal bankruptcy after a certain point of time. And, secondly, the present government came to power criticising the 5th Pay Commission, rightly, as the one that had destroyed the fiscal economy of the country. But the first act of the new government was to revise the pension rates. All those pensioners who had retired before 1 January 1986 got pensions based on the revised pay scales. This is an absolutely ridiculous proposition. In the Railways today, for every 10 employees, you have six pensioners. The ratio is similar in defence. If you have the money to pay for the pensions, nothing like it. But the trouble is that the system you have is unfunded and it is a time-bomb that is ticking over. Firstly, we have to change the nature of the pension funding system. Secondly, we have to reduce liability. You cannot reduce immediate liability today, but certainly you can reduce liability in the years to come. This can be done by managing the growth in the employees' strength. If you take the case of state governments, for example, 95 per cent of the revenues that the state government raises goes in salaries, pensions and allowances. Take Kerala or Karnataka or any state, it is no different. The Karnataka Government has six lakh employees and three lakh pensioners. These nine lakh people basically consume 75 per cent of the state's revenue. So what governance, development and public investment can you have? This is a serious problem that needs to be addressed. Pension, and its nature, is a part of a broader problem of government expenditure.

Corruption. The track record in India shows that whereever you have changed, decontrolled and have brought in market forces, the contributions of these sectors to corruption have come down. There have been some corruption intensive industries in India, like the cement industry, which used to be notorious for generating black money, for corruption. It no longer is. Gold, till the mid-1990s, was a major *Hawala*. Today, if you look at the *Hawala* rates for gold, the bottom has been knocked out. The main reason being the complete ending of the *Hawala* route for gold transactions, because import of gold was liberalised. Land is a very major source of corruption. That is because the land market is a controlled and regulated one. It is not as if Indians are more corruption prone. There are many people who believe that there are two types of corruption: need based and greed based, and you can classify all humans into one of these categories. I think we are as corrupt as the Americans, Indonesians, Australians, or anybody else. But the fact of the matter is that the control system that we have put into place and the discretionary powers that we have given to officials, lead to corrupt practices. I am quite confident, for example, that in four to five years time, the corruption in the Delhi electricity system would come down dramatically because power distribution has been privatised. I am convinced that this is going to happen. The Delhi Vidyut Board (DVB), which used to be a source of major corruption, will no longer be the case. So I think the answer to this easily is faster liberalisation, faster decontrol, and having a set of measures which reduce the scope for discretionary powers.

Governance. It is true that the pace of change in our system is very slow. Some states move a little ahead, they take one step forward, and one back. We also have to recognise that in order to take quantum leaps in governance, which distinguishes China from India, the quality of governance needs to be improved. One has to understand why there is no good governance in India, and what are the structural impediments to it. There are serious structural problems which we are now beginning to face, which we did not face 20 or 30 years ago. The structure of financing of elections, for example, is a very important source of generation of black money, corruption and the bad governance syndrome. I think the whole electoral system that we have, the "first past the post" system versus the proportional representation system, itself has now become an impediment to good governance, because political parties are responding to the lowest common denominator, and you are appealing to smaller and smaller sections of society. Today, for example, political parties in Tamil Nadu do not appeal to the Scheduled Castes, they are appealing to right-handed Scheduled Castes and left-handed Scheduled Castes. The Congress Party in Uttar Pradesh is not appealing to Brahmins, they are appealing to *Sharaupra Brahmins, Kankyakubja Brahmins, Kannauj Brahmins, Varanasi Brahmins*, and so on. This is a part of the electoral system of the "first past the post" system that we have adopted. We really need to look at what changes have to be brought in. The third reason why we do not have good governance is because of the structure of incentives and disincentives within the administrative system. You have Article 311 of the Indian Constitution which makes it virtually impossible for any government to dismiss anybody on the grounds of incompetence or moral laxity. Article 311 was put in to instill confidence in the Civil Services, but clearly, it is an Article which has outlived its utility. The structure of incentives and disincentives for the bureaucracy is one of the impediments. Another factor which we need to look at is that there really are no institutions in India which bring about convergence in thinking. There are no forums for consensus. All our forums are basically adversarial forums. Unfortunately, the media has become an adversarial media. The most popular programme on TV is the Big Fight. Every time I appear on the Big Fight, Rajdeep Sardesai tells me, "I hope you will not agree with the BJP guy. I hope you disagree". Even if I have to agree with him, I am forced to disagree with him on TV and that becomes a self-fulfilling prophesy of a kind. There are no forums which bring about a consensus in policy-making. For these structural reasons, good governance has become a slogan and not a reality. Till we begin to address some of these structural issues, it will continue to be the case that we take one good step forward, two bad steps backwards and muddle along and not have the type of coherent approach which the Chinese have.

Air Vice Marshal D.S. Nagi

There is a need to refine the fiscal system in terms of better discipline, accountability, and capabilities for managing money. Also, regional disparities in development and Centre-state relations need to be considered. How can proper utilisation of the money being given by the Planning Commission to the states be monitored? Mr Sanjaya Baru talked about the slogan of *Garibi Hatao*, whereas actually it is *Ameeri Baraoh* (increase riches). Because very little money trickles down to the grassroots.

What type of discipline in financial management and fiscal control can the Centre bring in the present political set-up? If one state is doing well, it needs to be given incentives. States must be given freedom for trading internationally.

Brigadier Narendra Singh

We say that revenue generation is not in keeping with our requirements. Yet, thousands of crores are siphoned off in cattle feed and fertiliser scams.

The government has done nothing to catch the culprits. Look at Pakistan under a military CEO who is not an economist. But he created a cell to find out who the perpetual bad borrowers from banks were and their total assets were confiscated. We have not taken any step in this direction. Is the government doing anything to recover the money from scams?

Brigadier Mehra

The government gives *ex-gratia* money to people after a railway accident. The Railways lose crores of rupees and we have to foot the bill.

My second question is, are the pensioners being targetted because they cannot go on strike?

Colonel Bhushan

My question is for Mr Jairam Ramesh. The power of compounding of the returns of money is well known. The rate of interest on savings being paid by the banks is going down. How can this problem be solved? Can a relationship between the power of compounding and savings rate of interest be worked out in the interest of economic stability?

Shri K.C. Nahata

Pension has become a problem, yet it has to be given. This is because it is deferred payment but we do not cater for it. If a monthly provision for the next five to 10 years of pensions is done, it may provide a solution.

Lieutenant Colonel Shinde

Though pension is called a time-bomb, there is a large percentage of population that is ageing and unproductive. Cutting off pension is no solution. Social security has to be thought for the greying population.

Wing Commander Reddy

My question is for Mr Jairam Ramesh, who mentioned about adversarial media and cited the example of the programme, The Big Fight. Cannot the participants rise above the adversarial attitudes which are desired by the anchors of TV shows? This would be good for the nation.

Air Vice Marshal D.S. Nagi

We would like some views on the issue of black money.

Vice Admiral Bangara

The common thread is good governance and we have accepted that we would blunder along for a few more years until there is an explosion or implosion. After listening to you, external and internal debt management does not seem as critical as good governance. How long would India blunder along in the globalised world?

Colonel Subhash Chadda

There are three types of invasions which have occurred: one, from the western borders, the second, the economic invasion from the northern frontiers (China), and the third, the internal invasion of corruption. Do the politicians and bureaucrats have a long-term policy which may help the nation to come out of this and be a role model for other nations?

Brigadier G.L. Sachdev

I want to ask Mr Jairam Ramesh regarding the definition of pension in relation to deferred pay. Second, when he sits in the Parliament and the Parliament does not work, he still gets his pay. Do he and his friends forego their pay for that duration?

Ambassador S.K. Bhutani

I wanted to mention in quantitative terms that 90 per cent of the pensions go to the poor classes. After 30 years of service, if you deny them social security, what are you creating? Are you raising the morale of that 90 per cent? Many of them belong to the socially deprived sections. We legislate reservation of jobs and everything, and at the end of the day, you say that pension is a burden! I don't think that is fair.

Lieutenant General B.S. Malik

Blundering Along. There is a RAND Corporation paper by Ashley Tellis where he refers to India as "muddling along". There are three models: the way we are, muddling along, and shooting forward (8 per cent growth). It mentions that in case we shoot forward, Pakistan would cease to be a problem; it will have reached a point where it will give up competing with us. What it is doing at present is only because the window remains open. This situation gets us into what is referred to in the paper as "dirty stability". So some of the problems that we have created for ourselves are due to this muddling along. By going ahead,according to the author, we can get over the problems.

The second point is about pensions. There are certain social infrastructures which are operative. If there is a village with just five people, as in Ladakh, you do not tell the postman not to go to that village. Nor does a train stop running, if there are not enough passengers. As it is, there is also shortage of people in those departments in which the work involved is dangerous (other than the Armed Forces). We might come to a stage where we have to contract out security. So there are inherent problems in this particular region which we have got to be careful about. Of course, Pakistan has the system of the Fauji Foundation. Somehow, we have not been able to make use of this pool. If you have been following the events, there are many places where the Services (Armed Forces) have got out and Home Guards and other services have got in. Someone might ask, what is the Indo-Tibetan Border Police (ITBP) doing in foreign areas?

Shri Jairam Ramesh

Pensions. As Sanjaya Baru has said, economic security has been redefined as pension security. That is the message of today's seminar. But, no, in answer to your question, there is an extensive report that has been compiled by an expert group set up by the government on pension security and what alternative methods are available to meet genuine pension requirements and social security of people who retire at the age of 58 or 60 and then have a life expectancy of about 72 years. Because today if you cross the age of 58, the life expectancy of an Indian at that age is actually 75 years. You are really looking at another 17 to 20 years life span. The report is available on the Internet and there is a lot of debate taking place. The basic point in the report is that you must have a pension system that pays for itself. You cannot have a pension system that becomes a liability on the exchequer. As long as the numbers are small, the liability can be borne, but if the numbers are exploding, then that is what I meant by a time-bomb. The principle of having a pension and social security is very sound, but the country has to find sustainable ways of meeting that bill. There are ways of doing it. It involves a mix of contributions from employers and employees. It involves some investment in the capital market and a variety of approaches. People are beginning to think about this and it is a serious issue. I do not think that the issue is pension or no pension. The issue is whether it is the pay and you finance it as such versus a self-sustaining financial system. I am sorry if I gave an impression of pension or no pension.

Regarding the second question that was raised, there is a bill and ordinance pending in the Parliament which is coming up for discussion. This is a securitisation ordinance which empowers banks and financial institutions to collect the assets of those who are in perpetual default. Perpetual is defined in the bill. So, people are beginning to get tough and, in fact, action has already been taken in some cases. Predictably, the reaction has been equally furious. People are saying it is going too far and is too draconian. But the time has come when one needs to be tough. There is an old saying that there are a lot of sick industries in India but no sick industrialists. So what we have to address is this issue and the securatisation bill will go some way in empowering the banks and financial institutions to recover a part of the Rs 80,000 crore that is owed to them by small, medium and large industries, and I am hopeful that process will start soon.

Saving Rates. There were a few questions on saving rates. The conventional hypotheses is that you need a high savings rate to have a high rate of economic growth. Looking at the example of South Korea, in 1960, it had the same savings rate as India and yet South Korea achieved a growth rate three times higher than India's. So, it is a question of not just the savings rate, but also the efficiency with which you use the savings that get transformed into investment. Secondly, the relationship is not linear—that if you have a high savings rate, you have a high rate of growth—because experience shows that high rates of economic growth also feed back into high rates of savings. One could say, for example, in the last four to five years, where growth itself has been depressed, the saving rates have also come down. So it is a two-way relationship and unidirectional. I agree that one of the important objectives of fiscal policy is to promote long-term levels of savings and enable pensioners to invest in long-term savings

instruments. This is the main objective behind opening up the insurance industry, which took us five years. In most of the countries in the world, insurance is a long-term savings instrument. And now, as we have opened up the insurance industry, one of the expectations is that we will open up more avenues for long-term savings. Also, one has to recognise that there has been a shift in the Indian middle class mindset. When I was growing up, my father's objective was to invest in fixed deposits or take a long-term life insurance policy. But, today, capital appreciation is an equally important objective as long-term capital security and adequacy. So we have to have a mix of the two, between giving the savers the option of making quick capital gains as also adequate secure options.

Governance. There are structural problems toward good governance. The way we fund our elections is a constraint. The way we are organised in terms of the electoral system is a constraint. We do not bring about a consensus, as the Parliament has ceased to be a forum for creating consensus. In the south and peninsular India, like Gujarat, whether the Chief Minister is Narender Modi or Vaghela or Keshu Bhai, it really does not make a difference in terms of economic governance. The same is the case in Tamil Nadu, Karnataka, Andhra Pradesh and other areas. In many parts of India, you find that governance has now become institutionlised. Therefore, you have the option of doing better. But there are large parts of India which are still dependent on the vagaries of the political parties and, therefore, sometimes there is good governance and sometimes there is not. We need to address these structural issues. If we do not address these issues, we will meander along between 5 and 5.5 per cent rate of growth. India has survived for many years and it would continue to survive, is the old philosophy. But the real issue is that the aspirations of the people are also changing and expectation levels are increasing. Therefore, governments everywhere are under pressure to do something in a quick time-frame. I think that is the optimistic side.

Shri Sanjaya Baru

I had spoken about capability building as an important enabler for a country to feel secure in a globalised world. There is not single country which is modern, industrial and open which has less than 80 per cent literacy. So India cannot be an exception to that rule. Similarly, there is no modern industrial economy that is growing at impressive rates of growth which has a savings rate of less than 30 per cent. China, Korea and Malaysia have a 40 per cent savings rate. Many countries of South-East Asia have upwards of 30 per cent savings rates. We have moved dramatically up from around 10 per cent in the 1950s and 1960s to 25 per cent in the early 1990s. As Jairam Ramesh has mentioned, we have stagnated a little below 25 per cent in the last four to five years. Clearly, while productivity of investments is important, there is a need to increase the savings rate sharply. Unfortunately, all the discussions got localised on one aspect of fiscal management, which is pensions. But there are many aspects of fiscal management and many of the issues raised are in the Kelkar Committee Report on direct and indirect taxes. All of them impinge on our ability to push the savings rate up. The fundamental economic difference between India and China, in my view, apart from various cultural and political factors, is that our savings rate is 23 per cent and China's is over 40 per cent. That kind of huge gap in the domestic savings rate enables them to undertake much more investment in infrastructure. Productivity of investment is, of course, an issue, but the rates are different.

Finally, I do think that if India grows at 5.5 per cent, we are meandering or muddling through. I think we must have an understanding of what muddling through means. From 1950 to 1980, we muddled through for 30 years with a 3.5 per cent rate of growth. That was a period of muddling through. If you take the long-term view over the last 100 years, we had zero per cent growth from 1900 to 1950 (0.5 per cent); from 1950 to 1980, for 30 years we had 3.5 per cent growth; and from 1980 to 2002, we have had about 5.8 per cent growth. This period of the last 20 years was certainly not a period of muddling or meandering through. This was period in which the Indian economy certainly increased in size as part of the global economy. It was a period in which India became more competitive, internationally and sectorally, in areas like services, where we have become globally competitive. The challenge for us really is, where do we go from here? We talk of corruption as a problem today, but if you go back and read Gunnar Myrdal's *Asian Drama,* written in 1962, the only issue the author is obsessed with is corruption. India can do better if corruption is dealt with. India has done better, but corruption has also grown. Therefore, I think we cannot get obsessed with a single problem and say that if this one problem is solved, then we can progress. We will have problems of corruption, regional inequality, and various political challenges. Yet, we can do better, provided we invest in capabilities, and increase the productivity of existing

investment. Those are the kind of measures that are possible even within the existing political system. One message of Jairam which I entirely endorse is that some parts of India will learn from other parts. Some parts of India have done well. Recently, I was quite surprised to notice that the rate of growth of Maharashtra from 1985 to 2000 for a period of 15 years was exactly (to the decimal point), the rate of growth of Malaysia—7.3 per cent. Yet, how is it that Maharashtra's 7.3 per cent does not translate into a performance which equals that of Malaysia? It is because it is a part of a larger federation where the distributional consequences of this growth are not as good as in Malaysia. The capability building, despite the high growth in Maharashtra, is not as good as in Malaysia. Maharashtra's rate of literacy is half of Malaysia's. Therefore, this growth of income gets concentrated in a few hands, and it does not get distributed because capabilities have not been created to make use of that income and to invest in productivity. I am certainly not someone who is pessimistic about India muddling through. We have muddled through for 3,000 years, if you like to put it that way. But, certainly, I think we have done better in the last 20 to 30 years than in the previous 100 years. Therefore, I believe, it is possible for this country to do much better.

Brigadier Narendra Singh

On the domestic savings, how do you expect an increase when the interest rates keep falling every day? The mutual funds have failed, the share market has gone down. There is a crisis of confidence as far as the investor is concerned.

Shri Jairam Ramesh

Air Vice Marshal D.S. Nagi raised the issue of federal resource transfer. Are we subsidising poverty and inefficiency in north India? This is a very important issue. Last year, Chandrababu Naidu (Chief Minister of Andhra Pradesh) led a delegation of eight Chief Ministers who had demanded penalties for non-performance and non-utilisation and wanted to know why south India and Punjab are subsidising UP, Bihar and other non-performing states. This is increasingly going to become a very important issue, although it needs to be recognised that all the agricultural labour in Punjab comes from Bihar. That is almost forgotten when Mr Prakash Singh Badal meets the Prime Minister. Or that skilled and unskilled labour from Andhra Pradesh finds employment in other parts of India. In our system, we cannot take the view that there is no role for the central government and that UP, Bihar, West Bengal, Orissa, Assam and other such states are to be left to fend for themselves. We hope for better governance in these states. The role of the central government in these backward and poor pockets is not going to come down, it is going to increase. The pressure on the central government to do more in these poor regions is going to increase. Do not forget that today 40 per cent of India is in this belt and in another 25 years time, 60 per cent of India will be in this belt. And when 60 per cent of India is in this belt, to say that the Indian government has no role to play in their development would be politically suicidal.

Chairman's Remarks

We need to bring the focus back to economic vulnerability and measures for improving India's economic security and not get bogged down purely by pensions or sectional interests or other minor issues.

Air Vice Marshal D.S. Nagi

I am interested in the fact that the country produces more wealth. Black money, that is certainly there, and will continue to stay. But the point is of more money. How do the Chinese do it and what is the panacea?

Shri K.C. Nahata

Firstly, I agree with Shri Jairam Ramesh's observation that there is no consensus in the media, etc. As long as we do not have a demanding civil society, without any political colour, we are not going to have any progress in the political, social and economical spheres. Therefore, there should be a forum where consensus can be built.

Secondly, on economic policies, we have two problems, namely, inequality and poverty. These can be overcome if we have a policy of generation of wealth by involving the maximum number of people. But, in actual fact, the present economic policy entails involving the minimum number of people due to mergers, acquisitions and collaboration.

Regarding the WTO, can a student of a primary class compete with a university student? Then why, in the field of economy, are we allowing a person with a small amount of capital to be crushed by the larger and more powerful players like MNCs and TNCs. These MNCs and TNCs are like bulldozers; they always damage the smaller players. Therefore, if we adopt a system which inflicts such damage, how can we expect people to have purchasing capacity?

My suggested solution is that category-wise production must be ensured and no single unit should be allowed to produce more than the demand for one crore consumers or people. There should be no monopoly. There should be competition and level playing fields. This will take care of inequality and poverty.

Brigadier Narendra Singh

We have not heard anything about dumping which is a cause of great fear.

Air Vice Marshal D.S. Nagi

Is there a need to bring in some fiscal discipline and accountability within the Defence Forces to be able to generate funds and augment the total national economy?

Lt Gen B.S. Malik

There is a system in the Services being followed in the UK. I was the military advisor when our team from the Financial Directorate went to the UK to learn about the "New Management System" (NMS). In this NMS, which the Navy has followed very well here (but not, somehow, the Army or the Air Force) there is a lacuna. The system is very simple. You have three levels of budget holders: higher, intermediate and lower. Each level has a kitty and whatever you have to spend is given, and your area is defined.

But, unfortunately, we come back to the same point of bureaucratic control here also. There is the institution of a financial advisor. Initially, they were fewer in numbers, but subsequently their strength was increased. There was a conference with the Controller of Defence Accounts (CDA) representatives and it was proposed to have CDA representatives as advisors at the Command level and below. The advisor is now there to advise the

Army Commander, but because he has his own chain of command, he is looking over his shoulder. In actual fact, he only gives the advice which is permitted by his boss. But if the system was to really function, then he would be able to give the advice and the Commanders at various levels would be able to spend the money and have total control over it. The problem is not of the system, or the organisation or structure. It is a case of poor implementation. That culture has to change. It is the question of governance. One of the corrupt areas in the country, where black money is generated, is the film industry. The Mafia gangs used to finance them and all the black money went there and it became white. We see that even in this country with all the confusion, there are people who make films by taking loans from institutions, and they are succeeding. If that system can be sorted out, why not others?

Ambassador S.K. Bhutani

The rupee has been devalued frequently. How does is reflect on our economic strength? When talking of the developmental economics of China, could you also dilate on the social costs and benefits of that development? I think we should have a total view.

SUMMING UP BY THE CHAIRMAN, INCLUDING HIS IMPRESSIONS ON HIS JUST CONCLUDED VISIT TO THE PEOPLE'S REPUBLIC OF CHINA (PRC)

Exchange Rate

Firstly, as an economist, let me clarify about the exchange rate business. Let there be no misgiving, there is nothing great about the strength of keeping a country's currency high for the sake of prestige. The exchange rate is the price of your currency vis-a-vis other currencies in the market. It will vary with the demand and supply conditions. If you have excess demand for dollars, the rupee will depreciate and you will be forced to devalue or else the consequences will be very harmful for the economy. What are the harmful consequences of wanting to keep the currency strong for the sake of prestige? That our rupee is still at Rs 13 or Rs 12 or Rs 4 to a dollar versus Rs 50 to a dollar. Very simply, you will be outpriced completely. Your goods will simply not sell and your exports will stop. There is a duality

to it. Imports will also reduce if your exchange rate is overpriced. But exports will be so badly hit that the export component of imports itself would also become outdated completely. No entrepreneur would find imported inputs worth taking at very high exchange rates.

Second, the exchange rate is not a phenomenon for just one country alone. You have to take care of inflation. Imagine that your country is growing at an inflation rate of 7 to 8 per cent per annum. Will your goods become competitive if your exchange rate remains fixed at the old exchange rate? Your domestic prices have gone up, the costs of production have gone up, the label, in terms of the price of export goods, therefore, would have to rise. And once again, there will be no competitiveness whatsoever. You will be forced to devalue in a situation where the world inflation rate is zero or small and your inflation rate and mismanagement of the micro-economy is such that you cannot control inflation. So please bear in mind what economists call "maintaining real exchange rate of the country constant". You have to devalue under these two circumstances, viz:

(a) When there is a balance of trade deficit or balance of payments deficit and the exports are stagnating due to lack of competitiveness.
(b) If the inflation rate is very high as compared to others, then you will be at a disadvantage in export prices, and sooner or later, it will lead to a balance of payments crisis.

There is no prestige attached to devaluation of currency. The pound has been devalued, the dollar has been devalued, and so have other currencies. It is linked to the demand and supply. If your foreign exchange reserves are rising, apparently, the rupee will appreciate. But appreciation has a cost.

Visit to China

Chinese Pragmatism. I will now come to a very exciting conference that I attended at Shenzhen just two days ago, from 17 to 18 November 2002. Shenzhen, is the first special economic zone of China. In 1979, under the great leadership of Deng Xiaoping, China determined that it was time for the old things to stop. The Cultural Revolution did not yield anything. Pragmatism would make the Chinese prosperous and create wealth. Wealth is not a dirty word even in a Communist country. The first country to recognise this was China. Mr Deng Xiaoping said, "I do not care whether the colour of the cat is black or white, as long it catches mice, and as long as it catches mice efficiently". So this is how economic reforms began in Communist China. China gave up its prejudices and shed its old baggage of centralised planning completely. And, at that particular time, they foresaw that the USSR could be in trouble later on. Mr Deng, as the Party chief, could foresee a little bit, because he knew the power of the bureaucracy that was holding them back. But, most important, he recognised that China had to be made a force and economic power in the world. He understood that this would make a great deal of difference in making China attractive, and the Chinese would regain their glorious power which they had 2,000 to 3,000 years ago. China is a big country. They were very important internationally, just as India was. If you go back in history, we were a power to reckon with in international trade. Even in 1947, we had 2 per cent of the world market share in exports and imports. Despite all our planning, by 1990, it went down to 0.5 to 0.6 per cent. We became inward looking.

Mr Deng Xiaoping, when he began the economic reforms, said that China would never give up the political Party control in the new market-oriented reforms. They invited the very people they had hated in Marxism—the TNCs and MNCs. This was a pragmatic approach: why can we not use MNCs and TNCs to advance the nation's interests? Let them profit and let them make money, it does not matter. But, if they do so, first, they must create wealth in the country, and the infrastructure, which they cannot take away, and which belongs to the Chinese people. This was a very important recognition by Mr Deng. He wanted to use FDI for benefiting China. Because at that time, China's saving rate was quite low. At that time, its per capita income was the lowest, almost at par with that of India. Today, China has US$ 1,000 per capita income. Whereas India is stuck at US$520 or 530. In the case of small scale industries, India is stuck with concepts. In the case of China they gave these up. The Chinese leader said that if political discontentment has to be managed, let us open up only small areas to marketisation and the influence of foreigners, like the coastal zones, not the whole of China. Please understand how politicians and policy-makers function there.

Investments in our public sector are huge, but what about the rate of returns, the quality of growth of social institutions? A Japanese economist put it very well. He said that God has endowed India with so much natural wealth, talent and human intellect that there is no reason why India should not be at the top of the world. But the problem, according to the great Japanese planner, Suboro Okita, is the prawn culture in India. Indians are

enemies of themselves. This is a very important social observation. One Indian cancels the efforts of another. There is no net progress. One plus one, instead of becoming two, becomes zero.This then is a very important observation from Japan. What did Japan focus on? It competed with the West on its own terms, and made it redundant, and surrender in economics. This was the zero defect, unknown to the Americans. Americans had always emphasised quality, but never the zero defect. So the Japanese said that what the Americans preach, we go and learn, and we practise it in Japan, and that is how we have grown in international competitiveness. Their *mantra* is international competitiveness, if you wish to stand on your own feet. The important thing is that the world has a great opportunity, the riches lie elsewhere. No country has become very rich by just tapping the domestic consumers. Please bear this very important observation in mind. The Chinese did so, too. They decided, let us go and milk the rich everywhere else, and let us strengthen China. And let us also strengthen China by the contribution of overseas Chinese. We all talk of US$ 40 billion foreign investment in China. Where does this come from? Only 20 per cent comes from America, Europe or Japan; 80 per cent comes from overseas Chinese, based in South-East Asia, the USA and Europe, by the Chinese based in Hong Kong and Taiwan. What have these people done? The motherland concept and patriotism is very strong and there is no compromise on secessionism, at any cost. It is extremely important to say that we will make bonds and make them profitable and charge economic pricing, which will make them productive bonds, worthy of holding. That is how the saving and investment rate is very high. All of it has gone into infrastructure and export building. This needs to be borne in mind. Kunming today has six full flights from Bangkok daily. The airport is ready to operate traffic visualised 20 years hence. Take Shenzhen itself, which was developed during the last 10 years: 20 years ago, it had a population of only 30,000, and today, it is five million, excluding the floating population. Their thrust is exports and they have a great advantage in labour productivity. They, like Japan, began first by producing shoddy goods. Step number one on the ladder was freedom to coastal and special economic zones, like our free trade areas, but a much better version. There were no controls or labour laws in the zones, unlike in our case, which creates problems in the minds of entrepreneurs who want flexibility. In the Chinese system, you allow genuine market forces to discuss and discover where competitive advantage lies. Where do you need to go is answered and decided by the markets and the entrepreneurs. The Communist Party does not plan it.

Another very fundamental difference between India and China is that in the case of China, the provinces are financially more powerful than the Centre. Interestingly, transfers are not from the Centre to the states, they are from the states to the Centre. Somewhat like in the old days in India when the provinces used to give collections to the King. The provinces in China have a great voice, they have an amazing relative independence in terms of attracting foreign investment. They have their own policies for growth and there is a very healthy competition among the provinces. We are seeing some of it in South Asia. This system works.

So, in sum, the steps are:

(a) Step number one is opening up the coastal zones with complete freedom. The Chinese, with their labour intensive competitive products, are gradually moving up the ladder. They are a force to reckon with. The shelves in the markets in the USA are full of Chinese consumer items like electronic goods, electrical goods, hand tools, garments, leather products, watches (earlier, watches used to be made in Taiwan, etc)—name any labour intensive product, it is there. Everyone is now moving to China and this happened due to the wise policies of opening up.

(b) The second step was opening up the small and medium enterprises to foreign investment. This was called the town and village enterprise. There were no qualms if a foreign direct investor wanted to have an 80 per cent share in a small scale industry in a village. He could go ahead. But the price extracted by the Chinese government was 100 per cent export oriented. There was no conflict with the domestic economy. Infrastructure building was given the highest priority.

Other Important Observations

The role of the military is amazing. After retirement, pre-retirement and in service, the military men own huge enterprises. We have talked about corruption. There is a lot of corruption in these military enterprises also. Hanging of corrupt persons by death squads is routine. Elimination of politicians and people they do not like is also common. But what is important is that there is a difference in the corruption—what the Malaysians call productive corruption and petty corruption. In China, no common man is

ever harassed. There is no compromise on quality and standards. The bridges will not fall in 20 years and as there is no adulteration and mixing of sand with cement. Please remember this. This is an extremely important lesson. Yes, corruption is like the icing at the top, but there are no compromises in standards. International competitiveness is maintained. In Indonesia, you can get receipts for bribes. In Malaysia, there is a very interesting concept: 80 per cent of the black money is invested in industrial enterprises. The point that I am making is that corruption is not used for luxuries, for housing, cruises, travel, and so on, but for generating wealth. There is a very big difference.

The Chinese town and village enterprises are like our small scale industries and contribute 50 per cent of exports, or even more. And now the Chinese are determined to become an economic power. I could see the determination with my own eyes as I was going to China almost every year. They are determined to globalise and have done marvelously well. In 1979, India and China were not very different from each other. Today China is at least 20 years ahead of us. It has the same 9 to 10 per cent growth rate, even if it is claimed to be fictitious. But never mind, go and see the state of the Chinese infrastructure, their rising manufacturing competitiveness, their penetration of the markets in the whole world in labour intensive products, their FDIs, and the experience of the overseas Chinese. You will marvel at what is first rate creativity, attitude, infrastructure and first rate labour productivity standard, without any compromise. This is going to take them ahead. Today, the only country which is jacking up the stagnant world economy is China, at number one position. Luckily, India is number two.

Shenzhen Conference. The conference at Shenzhen was conducted by the small Shenzhen Municipal Corporation, which, incidentally, has US$300 billion of foreign exchange reserves, which is more than the Japanese have. This transformation gives them great flexibility. The Americans would never wish to antagonise them. War is not on their horizon, because political legitimacy can only come through prosperity. They may become militarily a big power, but it is not in their interest, at this time, to create any disturbance whatsoever. The only way in which people can say inequalities are all right is when each person's standard of living is rising compared to his task and, therefore, he says, "I do not care who governs". These are the comments written in the Chinese Press. Similar is the case in the interviews of the common man by the BBC (British Broadcasting Corporation) and other media, other than the Chinese, which is very controlled. The opinion is that it does not matter whether Mr Jiang Zemin goes or Mr Hu Jintao comes. They say, "I am sure that there will be economic stability, I am sure that China will prosper".

The people are convinced that the Chinese government, in a determined manner, is integrating in the globalised economy. This will bring tremendous benefits of an additional 2 per cent growth rate, and at least 5 per cent of additional growth in exports, and at least $3 billion of extra FDI. This is a win-win situation for them. They have done it beautifully and the world respects it. There is no doubt that they have made the whole world sit up and take notice of them. Even at this conference, in the small town of Shenzhen, they had invited Al Gore from the US as a speaker. Other speakers invited from the US were Paul Volcker, the former Federal Reserve Chairman, Jack Bowman, the number one man of the IMF bureaucracy, the 1999 Nobel Laureate in Economics Robert Mundell, and Mike Moore, the former Director General of the WTO. There was Bob Hawk, the former Prime Minister of Australia and Fidel Ramos, the former President of the Philippines. All were talking about, and singing the praises of, China. The Chinese want to make sure that people come to China, see it for themselves, and turn into "China fans". You can now imagine the comparison between India and China.

I think we need to wake up. We need not copy everything. We certainly wish to remain far from the tendencies of the hold of the Communist Party. Given what we are, I do not think there is any doubt about that kind of political system being wrong for India. But on economic policies, there is so much to learn from their reforms, and there are so many common problems in inequality. Their backward area investment is huge. Municipal bonds have been lapped up by the overseas Chinese and others without any difficulty. The fiscal deficit has been converted into surplus. In a few years time, they have done what others like Taiwan and South Korea have done. Every penny of the World Bank was paid back within 20 years. So, 20 to 30 years are enough if a country wakes up, to build its strength and economy. There is no doubt that this is the foundation of national security. This august gathering must understand and I think that Lieutenant General Malik has put it very well, and even Shri Jairam Ramesh recognises that a prosperous treasury gives you the flexibility of no conflict between butter and guns or between bread and butter and defence expenditure. It is a false comparison, if you are growing well and you keep your population under control, and your per capita income is growing at the rate of 7 to 8 per cent, as in China.

Doubling of income every four years and denoting per capita income every seven years is an amazing transformation. In such a situation, you can combine the best of military power and modernisation with economic power and diplomatic power. The only problem which I had reading Lieutenant General Malik's paper is that he mentioned diplomacy several pages later. The non-economic security strengths certainly include diplomacy as a very important strand. If you can leverage diplomacy, that reduces the need for wars. China has combined it with economic leverage. Even Japan curries favour with China. Orders worth billions of dollars would be lost to the Americans. Just Coca Cola alone made so many billions of dollars by selling one bottle per person. Imagine, if Coca Cola's sales go up by a billion bottles a year. How much stake they have and the interdependence that my economist friends were talking about that has been created and that they wish to preserve. They are very clear about the dangers of globalisation. For tackling dumping, they have set up an anti-dumping bureau. For the first time, they are going to impose very heavy duties on steel imports from the US, Europe and elsewhere. I hope I have given you some idea of this very important development and enigma called China.

Closing Remarks and Vote of Thanks

Lieutenant General Satish Nambiar
PVSM, AVSM, VRC (Retd.), Director, USI

Thank you very much, Dr Charan Wadhva.

Ladies and gentlemen, the seminar which we had yesterday and today has been much more rewarding than I imagined it would be when the Council took its decision last year to have this subject for the National Security Seminar 2002. We did look forward to enlightening ourselves and some of our members. It is ironical that only one of our Council members is present here today. But I think it was a very good decision. Personally, I have benefited a great deal and I am sure all of you have. I thank all of you for attending and thank on your behalf, the participants who responded to our request to come and present the papers, and the discussants.

Finally, just a couple of points. First, to reinforce the point Mr Charan Wadhva has mentioned about the Chinese performance. I was in Shenzhen on 30 September 2002. It was remarkable to see the way they are going about it. But I think we need to temper this with a bit of realism. We talked of the system, but frankly, I would not want to trade our system for theirs. On that I would be quite frank, notwithstanding all the dust, heat, poverty, and all that. I would much rather have our system than what they have. Just to illustrate the point to Brigadier Khanduri's question. When I was in China in 1998, I was driving and we saw some residential property being bulldozed along the side of the road in order to widen it into a big national highway. I asked our guide, who was a university student, that when you demolish a building, do not the residents object to it or have any problem? He said, "How can they object? The state gave it to them, and now the state

is taking it back." In our case, if you decide to widen a highway, there will be stay orders in the Supreme or High Courts. But the fact remains that they are all clear about one thing—they are out to make money.

But that does not detract them for a couple of things. One is the infirmities in their system. I think they are recognising it. If we give Dr Charan Wadhva another chance, he will enlighten us on some of them. The other aspect which we need to recognise is that the money that goes into the Chinese economy is not all from the West or the industrialised world. It is the Chinese themselves, like the Taiwanese, Chinese from Singapore and Hong Kong, who are investing in China. A very large percentage of the share of what is going in terms of investment and foreign capital into China is from the overseas Chinese. The Taiwanese are into it in a very big way. Do not bluff yourself that differences between them have had any adverse effect. In any case, the Taiwanese are one of the strongest shareholders in most of what is going on in mainland China. So that again is something that we do not have. But that does not, as I have said, give us excuses for our lack of performance. I think our lack of performance is related to not rewarding merit. There is no meritocracy in our system. Those of you who are sitting here, just do a little introspection and you will realise it yourself. I am sure you give all your subordinates serving under you a 9 point (outstanding) Annual Confidential Report (ACR), so that the good guys are as good as the bad guys. I mean that it has to be recognised. The person who is good, must be recognised as good. The person who is half-cocked, must be judged accordingly, and there should be no false sense of compassion for the non-performers. So if you are prepared to go along with that system, I am afraid you have to suffer some of the disadvantages that come with it. This example has been given so that you do not go with this Chinese vision and have it cloud your lunch or something like that. I think we have a lot to thank ourselves for, but still we have to get our act together.

With that, on your behalf, I would like to thank this particular panel of Dr Charan Wadhva, Lietenant General B.S. Malik and Ambassador S.K. Bhutani besides the other two who came and had to go early. I am sincerely grateful to all of them for having responded to our request to participate. I am sure that they have made us wiser.

Thank you, ladies and gentlemen.

NATIONAL SECURITY PAPER (P-20)

SAFEGUARDING OF INDIA'S ENERGY SECURITY

BY

SHRI CHUDAMANI RATNAM

Safeguarding of India's Energy Security

Shri Chudamani Ratnam

Introduction

Energy is the very basis of modern civilisation and without adequate quantities of this commodity, mankind would not be able to enjoy a lifestyle much different from animals. Unfortunately, India is woefully energy short and as the masses clamour for a better standard of living, we may be in for a period of great political turmoil, threatening our existence as a nation, unless we can provide adequate quantities of energy, which at present can only be done through import, at great cost. In this context, national security assumes two aspects. The first is a domestic one in which the integrity of the nation itself is at stake without the availability of large quantities of energy. The second is that lacking indigenous sources of energy, it is necessary to secure external sources of energy by commercial, political or other means. As of now there is no scientific or technological solution to India's energy problem.

The powers that be in India do not appear to have fully realised the importance of energy for national well-being and there is a feeling that a *Ram Rajya* type of Golden Age can exist without the need for any commercial energy. What they do not realise is that in those fabled days, amongst a host of ills, everybody was illiterate, as Devnagiri and other scripts had not been invented and the average life expectancy at birth was less than 10 years against 60 years today. The idea that people can actually be happy under such conditions is totally untenable.

A valid criticism of this paper could be that it highlights only the energy related problems but does not necessarily offer satisfactory solutions. It does, however, indicate what other countries, the successful practitioners of the art, are doing about their own energy problems. One hopes that this information will encourage a national debate and eventually a more pragmatic energy policy will emerge. It could also be argued that these successful practitioners are using their military might to implement their energy policies, but in a Darwinian sense this would be putting the cart before the horse. It would be more correct to say that their visionary energy policies over more than a century have given rise to their military might. These policies are designed to provide more energy to all their citizens and not just to a privileged minority, or to increase the profits of greedy oil companies.

While most nations have learned to live, by and large, on the natural resources of their own land, they have not managed to do so within their own energy resources. Unfortunately, technological progress has failed to find a solution to this problem and the indications are that it will not do so for many decades. From the beginning of the 20th century onwards, almost all wars, hot or cold, have been fought over control of access to just this important resource viz. energy, exemplified by two related commodities, crude oil and natural gas. Fate has willed that almost the entire surplus of oil and gas is concentrated in a part of the world which can be conveniently referred to as the Greater Middle East, stretching from North Africa to Central Asia.

At current production rates, the known and prognosticated oil reserves of this region are expected to last between 30 and 50 years and the gas reserves for perhaps between 50 and 100 years. After these periods, oil and gas production will not cease but will continue at progressively declining rates for many more years till production becomes uneconomic. Once the developing countries become large importers, these numbers could be drastically reduced, especially for gas. The developed nations have very long-term visions, unaffected by short-term political considerations and have factored this time-frame into their national and international policies.

Advanced countries such as the UK and USA owe a major part of their development, initially to the successful harnessing of indigenously available energy and later to the control of the resources of energy surplus countries such as those of the Middle East. As history has demonstrated time and again, they have not hesitated to go to war to secure their energy supplies.

In fact, most of their foreign policy is aimed towards energy security and also towards denying the same to potentially the present and, more importantly, the future adversaries. The creation of modern Israel is a brilliant example of a very far-sighted energy policy. India needs to think on similar lines. The object would be not only to protect our lines of supply but, more importantly, the actual sources of supply.

Historical Background

As early as the beginning of the 20th century, when oil was first discovered in Iran, Winston Churchill, then just a junior Minister in charge of the Navy and though ostensibly a stalwart of private enterprise, stepped in to acquire a controlling interest in these oilfields on behalf of the British Government. Around the same time, recognising the technological trends, he converted the British Navy from coal to oil fired warships. No wonder it has been said about World War I, that the Allies floated to victory on a sea of oil.

The Germans recognised this and in the immediately following years, put a lot of effort into developing processes to manufacture synthetic oil from coal. They realised that the next war, which they believed to be inevitable, would be fought with tanks and planes, and they needed to ensure adequate quantities of liquid fuel, no matter what the cost. All this was done when Hitler was still a rabble-rouser in the streets of Munich. Much discussion has taken place as to why, when Hitler had Britain at his mercy, he turned his troops eastwards and invaded both the USSR and North Africa. The reasons are obvious. Germany urgently needed crude oil, which then was available, outside of North America, predominantly in Central Asia and the Persian Gulf. Hence, the two eastward thrusts of the German Army were made to secure these resources. Being equally alive to the situation, Britain diverted much war effort, at considerable risk to itself, from the home front to protect the Middle East. Montgomery and Rommel were only figureheads in a vast energy scenario. The Japanese move in World War II towards the oilfields of South-East Asia was a reaction to an American-led oil embargo and the attack on Pearl Harbour was to protect its flanks.

Energy and Standard of Living

The average person usually sees energy only in the form of electricity for household use, cooking gas and petrol for his car or two-wheeler. However, much larger, by a factor of many hundreds of times, is the quantity of energy directly or indirectly required to maintain our standard of living such as in agriculture, infrastructure and industry. For example, the ubiquitous bicycle which only requires human muscular energy for its propulsion, is a significant consumer of energy in its manufacture because of, among other things, the steel and rubber that is needed, the machinery for its manufacture and the trucks that deliver the finished article from the factory to the shop. Even our daily bread is equally energy intensive because of similar needs, apart from baking, of ploughing, irrigation, fertilisers, pesticides, and, very importantly, marketing.

India has been struggling for the last few decades to provide a better life for its people and, by and large, has nothing to show for its efforts. Even measured by the standards of the so-called developing countries, India is close to the bottom of the pile, and considering the population size, it is the largest reservoir of human poverty and associated ills in the world. In absolute numbers, India today has more poor people, more illiterates and more sickness than ever before in its history. The situation, especially in relation to some other countries is brought out dramatically in Fig. 1. It can be seen that over the last two centuries, while some countries have undergone an exponential improvement in standard of living and are continuing to do so, India has not only not developed but the trend of the graph suggests that it will not do so at all in the foreseeable future.

Energy Essential for Economic Development

As has been stated above, the progress of the developed countries is almost entirely due to the successful harnessing of energy, initially in the form of firewood, then coal, and from the 20th century onwards, petroleum. Energy acts like a force multiplier and, thus, a small amount of physical effort by a human being is translated into a large amount of mechanical work. This is how surpluses are created, leading to an economic growth spiral, with accompanying social benefits.

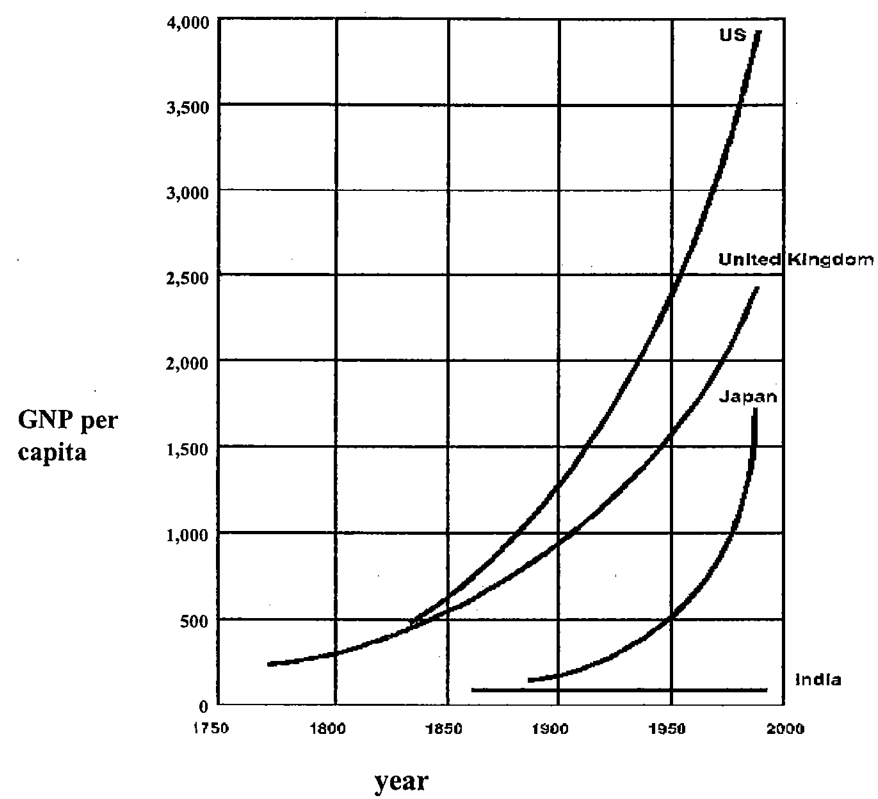
This is evident from Fig. 2, which clearly indicates a direct correlation between energy consumption and standard of living, and, hence, without adequate supplies of energy, there can be no economic growth. India is very close to the bottom left corner of this figure.

Energy is related to economic well-being in the same manner that a building is related to the foundation on which it stands. If one metre of

Fig. 1

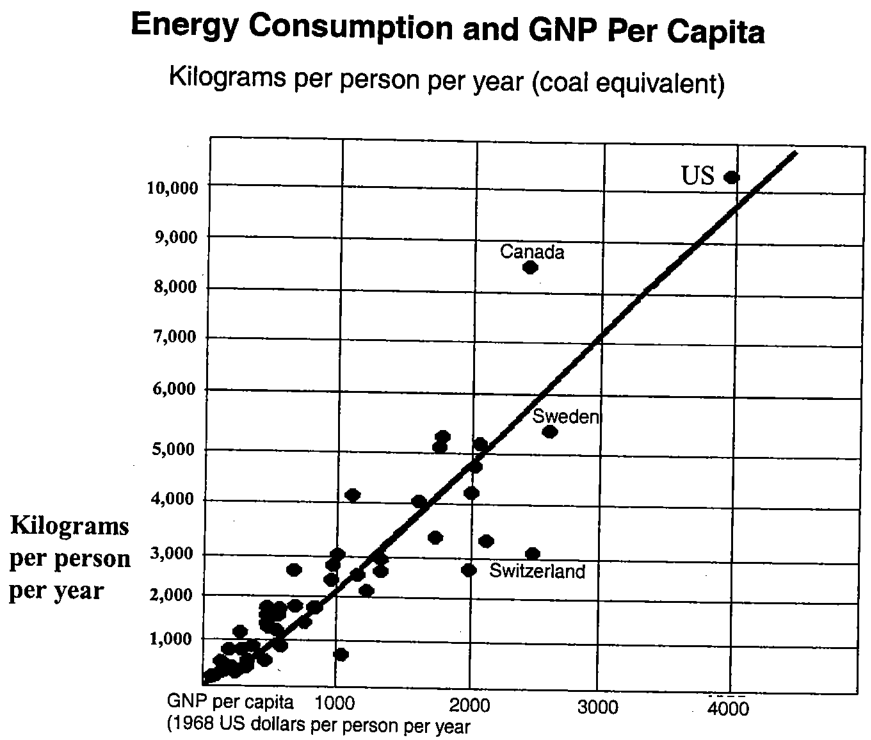
Economic Growth Rates

GNP per capita (US dollars per person per year)



foundation is cut, the building has to be reduced, not just by one metre, but by many tens of metres. In the case of energy and economics, the relationship is that roughly Re 1 of energy, at current oil prices, generates Rs 30 of goods and services. The ratio, in whatever form or units it is expressed, is called the "energy intensity". The reverse is also true and the generation of Rs. 30 of economic output requires the input of Re 1 worth of energy. To use the terminology of mathematics, availability of energy is a necessary though not a sufficient condition for economic progress. In this paper, there will be some inconsistency in comparing monetary figures because of wide variation in exchange rates, inflation and international oil prices. However, figures within each paragraph, chart or table are self-consistent.

Fig. 2



Energy Scenario and India

India is unfortunately tremendously energy short. How, then, do we see a situation in which a population of about 100 million Indians, which is larger than that of most European countries, has a standard of living comparable with the average in some developed countries? The answer is that the remaining 900 million are contributing a small amount of muscular energy each towards the welfare of the privileged upper crust. While the advanced countries were applying their minds to the problems of acquiring and exploiting energy, India concentrated on institutionalising its caste system which ensured that for all time to come there would be a vast reservoir of human energy which itself would hardly make any demands on the economy.

This conclusion has been derived by computer based economic modelling commissioned by the famous think-tank, The Club of Rome, whereby it has been demonstrated that had there been no population growth in India over the last 150 years, there would not have been any industrial growth. Industrial growth requires capital formation and under Indian conditions, this capital is acquired by milking the population of small quantities of their savings. Hence, the larger the population, the larger are the savings going into capital formation and if there is no population growth, there are no surplus savings available. In this context, savings are generated from surplus human muscular energy.

A simple empirical calculation will illustrate the point. Let us assume that each one of the 900 million under-privileged people are generating by manual labour, energy equivalent to one litre of oil per day, of which 10 per cent is going to support the more privileged 100 million people. This provides about 3 tonnes of oil equivalent per annum per capita to the Indian middle class which is the same order as the energy availability in Europe.

Over the last 150 years or so, as more and more people moved up into the middle classes, the Indian socio-economic system adjusted itself by allowing the population to increase, but the system is nearing its breaking point. Roughly 100 million people of the Indian middle class, who are enjoying a standard of living comparable with the developed countries, are being supported by nearly 900 million of the remaining population whose standard of living has not improved at all in the last few centuries. When the creamy layer, that is, the next 100 million just below the middle class, starts demanding its right to a good life, the remaining 800 million will not be able to come up with enough human energy. The cake is just not big enough for 200 million to share.

This situation cannot continue indefinitely and in fact what is surprising is that it has continued so far. It is only possible in a caste-ridden society with a fatalistic attitude to life, as distinct from a class divided one. All political parties claim to stand for the poor, but before long people are going to ask why there are any poor at all. Various insurrections and communal incidents that are occurring throughout the country are a manifestation of the have-nots trying to move up the socio-economic ladder, as well as the higher-ups trying to keep them down. The 2002 riots in Gujarat were basically middle class inspired for this very reason. Every time the Armed Forces are called in to assist in maintaining law and order, they are participating in this social battle.

A serious threat to India's political and social stability would be caused by differential population growth rates in various parts of the country and in particular, it is necessary to take note of the high population growth in the Hindi-speaking belt. Because of various socio-political factors, the excess capital formation in this region is flowing out to the other parts of the country, where a relative improvement in standard of living is becoming more than obvious (See Table 1.)

Table 1: Per Capita GDP and Growth

State	GDP Rs. per capita per annum	Growth rate per capita per annum %
Maharashtra	19,200	5
Punjab	17,088	2.6
Haryana	15,552	3.5
Gujarat	16,320	6.5
MP	8,640	2.0
UP	7,000	2.2
Rajasthan	9,408	2.0?
Bihar	5,184	2.9

Reading between the lines of various fiscal reports, it would appear that the Hindi belt is serving as a colony of the more advanced states of India, with Maharashtra, for example, having a standard of living about four times higher than that of Bihar. The growth rates suggest that the problem is getting worse. If this difference is allowed to continue, severe tensions will develop between the states and it will become very difficult, if not impossible, to hold the country together. Such break-ups are occurring in other parts of the world and we may even see the demand for an independent "Hindi-stan". Political solutions cannot be found without first solving the economic problems and this cannot be done without the input of large quantities of energy.

In a very far seeing document initiated by the Prime Minister, Vision 2025, it is envisaged that by 2025, India would be the fifth largest economy in the world in "per capita terms". Assuming that the first four slots would be occupied, in order, by North America, West Europe, East Europe and East Asia, including China and Japan, this is a very modest objective, representing a standard of living comparable to that of a lower division clerk in the Government of India today. However, even to achieve this

limited aim, energy availability would have to be 1.5 tonnes oil equivalent per capita per annum, and with an expected population of 1,500 million by 2025, this amounts to 2,250 million tonnes oil equivalent per annum (one tonne=1,000 kg). There is at present not enough oil and gas in the Greater Middle East to supply these vast quantities, but this is what the people of India will expect and is a far cry from the conventional projections of various think-tanks which put their demand at about 500 million tonnes per annum of oil equivalent of energy.

India and the other South Asian countries have the lowest standard of living in the world. Measured in terms of per capita Gross National Product (GNP), the figure is Rs 10,000 per annum compared to over Rs 10 lakh in the developed countries. Even the so-called developing countries like Thailand have a per capita annual GNP of nearly Rs one lakh, based largely on imported energy. To achieve even this standard of living, India will have to import about Rs 300,000 crore worth of energy per annum as against Rs 41,814 crore per annum today, which is about 25 per cent of India's export earnings. This is equivalent to about 600 million tonnes per annum of oil or 2,000 million cubic metres (cu. m)of gas per day, as against about 70 million tonnes per annum of oil import today. Every Rs 100 increase in per capita annual GNP requires the input of Rs 300 crore per annum of energy at today's prices and population level.

Energy is commonly available in the form of coal, crude oil and natural gas, and, to a much lesser extent, in the form of hydro and nuclear fission generated electricity. India's miserably low energy resource base is brought out by the following approximate figures. This is probably the most important piece of information in this paper as all other conclusions follow from it.

Table 2: Recoverable Reserves Per Capita

Country	Coal Tonnes	Oil Tonnes	Gas Cu. M
Russia	1,186	45	28,447
USA	991	16	25,000
European Union+Norway	211	4.4	11,786
China	97	2.3	1,030
India	82	0.7	628

In Table 2, the figures clearly demonstrate that energy self-sufficiency for India is practically impossible to achieve if we are aspiring to any reasonably improved standard of living. Other conventional and non-conventional sources of energy pale into insignificance on the above scale. Even the USA, with a much larger oil reserve, imports more than half its oil requirements.

Internationally Known Energy Resources

Despite the wide diversity of world oil suppliers, the Organisation of Petroleum Exporting Countries (OPEC) retains the majority of the world's proven oil reserves and controls a significant portion of world oil trade. As of January 2001, about 80 per cent of the world's proven oil reserves were held by OPEC countries. Many major non-OPEC oil producers are also very large consumers, resulting in very low exports (or, in the case of the United States, requiring further imports to satisfy over 50 per cent of domestic consumption). OPEC holds the vast majority of the world's excess oil production capacity, with total non-OPEC spare production capacity estimated at 25 million tonnes per annum, most of which is attributed to down-time for maintenance. OPEC, especially Persian Gulf OPEC members, has the world's lowest oil finding and lifting costs.

The location of proven world crude oil reserves is far more concentrated in OPEC countries than current world oil production. Of the world's 141 billion tonnes (one billion=1+9 zeros, 1 trillion =1+12 zeros) of proven reserves, 112 billion tonnes are held by OPEC. Because non-OPEC countries' smaller reserves are being depleted more rapidly than OPEC reserves, their overall reserves-to-production ratio—an indicator of how long proven reserves would last at current production rates—is much lower (about 15 years for non-OPEC and 30 to 50 years for OPEC). This implies increased OPEC production as a proportion of world production over the long term. The Middle East also seems to have the best prospect of increasing its reserves substantially, may be double of the present figures, compared to other regions of the world, with the possible exception of Russia, in the 21st century. The world today produces 3.8 billion tonnes of oil per annum with OPEC contributing about 1.4 billion tonnes per annum.

Incidentally, Russia retains the bulk of the energy resources of the Soviet Union and the break-up of the USSR was to a large extent due the Russians not wanting to share these and other resources with the other Soviet

republics. The break-up was not particularly due to the other republics wanting independence, which would have been resisted with force. The remaining superpower, the USA, could have its problems too. Once indigenous oil and gas and cheap supplies from the Middle East are exhausted, one could perhaps see fissiparous tendencies developing within the USA, brought about by tensions between the Spanish and English speaking elements of their population. It is expected that these two ethnic groups will be equal in numbers within 50 years, to a large extent living in geographically disparate areas, and the English speaking part will have the bulk of the coal reserves which they will not want to share. Secession is not unknown in the history of the USA. It is equally relevant that the bulk of the energy resources of the European Union are concentrated in the more industrially advanced north-west of Europe.

Attention needs to be drawn to the Athabasca tar sands of western Canada. These are surface deposits of dried crude oil, which can be produced by special techniques, and, in fact, commercial production has been going on for many years. The reserves of this oil are of the order of about 300 billion tonnes, about three times that of Saudi Arabia and could replace Middle East oil in the years to come when the economic circumstances justify. These deposits fall within the ambit of the English speaking part of North America.

It has even been suggested that the Western powers should attempt to split off the Shia dominated oil rich eastern part of Saudi Arabia from the rest of the country, which is overwhelmingly Sunni of an extreme form. Knowing the animosity between these two communities, this would seem to be an eminently workable energy policy as far as the Western powers are concerned.

Reserves figures of coal in most countries, including India, are fairly well established and nothing more can be done to increase reserves. Oil and gas, on the other hand, are somewhat more elusive commodities and additions can be made by a combination of good luck and intensive exploration. However, there is a limit and at some point known reserves will start declining, as has already happened in the USA. Their reserves have steadily declined over the last decade or so and there seems to be no possibility of arresting the decline. Internationally, oil and gas finding methods are still very primitive, depending on luck to a large extent and there is no indication of any breakthrough in the applicable technology in the foreseeable future. Furthermore, it is theoretically possible to find only as much oil and gas as has been generated and preserved by nature which, of course, is an unknown quantity. India, unfortunately, has reached the level of declining reserves very early in its development compared to the USA and it is not possible to depend realistically on future discoveries on the scale that is required.

Measuring Energy

The equivalence of different forms of energy is as follows:

1 tonne oil=2 tonnes coal=11,00 standard cubic metres of gas=12 megawatt hours electricity = 42 million BThU (British Thermal Units)

These are thermal equivalence figures and do not quite represent what can be achieved in practice. It should be noted that electricity by itself is not a primary source of energy and has to be created from other sources, i.e. coal, gas, oil, hydro, nuclear, solar, wind, etc. In principle, different forms of energy are technically replaceable, e.g. a railway locomotive can be run on diesel, coal, compressed natural gas (CNG) or electricity generated from nuclear fission and though the process is uneconomic, other fuels can be manufactured from electricity using various raw materials. Natural gas is always stated in Standard Cubic Metres; i.e. at atmospheric pressure and 15 degrees Celsius, commonly abbreviated to scm.

It is necessary to be aware of the confusion in the Indian public mind between energy and electricity, the latter being a subset of the former. India today consumes about 669,000 megawatts (MW) equivalent of energy of all forms of which only 93,000 MW is in the form of electricity, consisting of 22,438.48 MW hydro, 67,617.46 MW thermal (coal, oil and gas fired), 2,225.00 MW nuclear and 968.12 MW wind. Total energy can also be alternatively expressed in tonnes of "oil equivalent" or "coal equivalent". It is worth noting that technically "power" is the rate of energy generation or consumption and it is also not electricity as is often assumed. In common units of power, for example, 1 horsepower is equal to 746 watts. Two other useful relationships are: 1 million standard cubic metres of gas per day=3.3 million tonnes of oil equivalent per annum; 18,000 barrels per day of oil = 1million tonnes of oil per annum.

The current energy availability scenario of India is given in Table 3.

Thermal electricity generation uses coal, oil or gas as fuel and is not shown separately as the quantities are included in the relevant figures in Table 3. The recently announced gas find in off shore Andhra Pradesh is

Table 3: Current Energy Availability Scenario of India

Type	Measure	Actual	Oil equivalent million tonnes per annum	Electrical equivalent megawatts
Oil Production	Million tonnes per annum	32	32	47,945
Gas Production	Million cu.m per annum	28,446	25.5	35,424
Oil Import	Million tonnes per annum	70	70	95,890
Coal Production	Million tonnes per annum	330	165	266,027
Hydropower	Megawatts	22,438	16.3	22,438
Nuclear Power	Megawatts	2,225	1.6	2,225
Renewables like Firewood, Biowaste, Wind, etc	Trillion BthU	9,015	198	271,233
Total			508.4	669,282

expected to add only about the equivalent of 12 milion tonnes per annum. India is a major consumer of firewood for domestic purposes, but reliable estimates of consumption are not available and in any case, this source of energy cannot be depended on or encouraged in the years to come. Strictly speaking, firewood is no longer "renewable" as the forest cover is being rapidly depleted in India.

To get a suitable perspective for further discussions, the energy availability figures for some countries and regions are given at Table 4 in terms of oil equivalent of energy in million tonnes per annum.

Oil and Gas. Much has been flaunted in the media about the "crown jewel" of the Indian oil industry, the Bombay High field, and its alleged mismanagement, which is supposed to be the root cause of India's energy problems. However, to maintain a barely adequate standard of living, i.e. that of a lower division clerk in the government, India needs the production of 80 Bombay Highs and needs to find two more every year. No Indian

Table 4: Energy Availability of Selected Countries in Terms of Oil Equivalent of Energy in Million Tonnes Per Annum

	China	India	Russia	USA	European Union + Norway
Oil Production	177	32	367	357	355
Gas Production	21.4	25.5	528	476	251
Oil Import	78	70		571	302
Gas Import				119	75
Coal production	505	165	248	548	194
Hydropower	18.5	16.3	15	71	85
Nuclear Power	1.2	1.6	30	190	200
Renewables*	241	198	44	76	35
*firewood, wind biowaste, etc					
Other Import				119	
Other Export				–98	–10
Oil Export			–233		
Gas Export			–179		
Net Total	1,042	508	980	2,310	1,497
Per Capita	0.8	0.5	6.7	8.3	3.9
Energy Intensity	6.6	9.1	3.2	18.2	29.4
$ production/ $ energy					
Per Capita Annual GDP(US$)	869	508	2,075	37,050	22,371

petroleum expert has ever offered this level of production and it is high time that both the public and the powers that be disabuse themselves about the possibility of oil and gas self-sufficiency.

Coal. Coal is the dominant commercial energy source in India, accounting for more than half of the country's commercial energy requirements. India has recoverable reserves of 87 billion tonnes of coal, including lignite, a less calorific form of coal. Seventy per cent of India's

coal production is used for electrical power generation, with the remainder being used by heavy industry and public use. Domestic supplies satisfy most of India's coal demand at today's consumption levels. Unfortunately, most of India's coal is characterised by high ash content, but the coal has other useful qualities such as low sulphur content (generally <0.5 per cent), low iron content in ash, low refractory nature of ash, low chlorine content and low trace element concentration.

Other Sources. It is necessary to consider at this stage the various other sources of energy that are promoted from time to time, the most obvious being nuclear fission. Despite all the hype about India's progress in nuclear technology, the current production of nuclear electricity is only the oil equivalent of 1.6 million tonnes per annum. To meet the total future energy requirement of India, including that being met by coal, oil, gas, etc., from nuclear fission energy alone, to maintain a basic standard of living, it would be necessary to generate about 3.5 million MW of energy against 0.7 million MW available today from all sources. This would require the setting up of 3,500 × 1,000 MW nuclear power plants, something that is not patently feasible. A particular disadvantage of all electrical power plants is that the capital investment has to be made before any electricity is generated, whereas an oil field, for example, requires only incremental investment while full capacity is being built up, earning income in the interim to fund future investments.

The Utopia of unlimited energy for all will undoubtedly be achieved when fusion energy becomes available. This is based on the principle of the hydrogen bomb and is delightfully simple in concept. Two atoms of hydrogen are fused to make an atom of helium, thereby releasing vast quantities of energy. Unfortunately, the technical problems in creating controlled fusion are so immense that they are not likely to be overcome till possibly the end of the 21st century.

Solar. Another source of energy remains to be considered in the national context, namely solar energy, as it is a subject of much discussion. Unfortunately, the energy per unit surface area is very small and the available technology can trap only a small fraction of it, less than 10 per cent. Hence, solar energy at present does not seem feasible when power generation in millions of MW is being considered. The average availability of solar energy at the surface of the earth is between 7 and 10 kwh per sq.metre per day in the tropics and to generate even 1 million MW, at today's conversion efficiency, a solar panel of an area of 240 × 100 kilometres, which is nearly a hundred times the size of Delhi state, would be needed.

Hydropower. Hydropower is certainly a possibility but by the conventional approach, i.e. by the construction of dams, the amount of energy available is somewhat limited. However, in north-east India, one can think of other means. The Brahmaputra river and its tributaries form one of the greatest sources of hydropower on earth. The flow in this river varies from a minimum of 3,280 cubic metres/second (cu.m/sec) to a flood peak of 72460cu.m/sec with an average of 20,000 cu.m/sec. The total potential at the head is nearly 5,000 cu.m/sec and if a significant part of this can be trapped, India's energy problems can be considerably ameliorated. The idea would be not to build gigantic dams but to channel the down flowing water directly into turbines. Such a system is already being tried in Bhutan and needs to be replicated by a factor of many times. A generation potential of one million MW or 700 million tonnes of oil equivalent per annum can be conservatively envisaged.

Energy Related Challenges for India

Among the various remedies for our energy problems that have been suggested from time to time, the one which has been a favourite of the bureaucratic mind is improving the "energy intensity", i.e. getting more efficient use of the available energy. In comparison with the advanced countries, the energy intensity of India seems to be very low, but this is because India is still trying to build up its infrastructure. Steel, cement and roads are prodigious consumers of energy; whereas electronics and other sophisticated products use very little energy in comparison to their value. Thus, for example, the Japanese economy, which is dominated by high intrinsic value production, appears to be very efficient in energy terms. Some Japanese thinkers have even proposed that they should aim to be a totally "brainware" economy by the end of the 21st century and shed all energy intensive industries to other, primarily Asian, countries. China has apparently a poorer energy intensity than India, but this ominously reflects the fact that the Chinese are investing more in their infrastructure, including their military, with a view towards future benefits. Russia, of course, is a classic example of an economy, which, starting with the Communist revolution, has concentrated almost exclusively on its infrastructure to the detriment of consumer production, and, hence, has apparently the worst energy intensity. Attempts have been made in the past to improve India's energy intensity by imposing strict rationing or other controls in the fond

hope that human ingenuity will somehow come up with a solution. Unfortunately, market forces do not operate that way. The last time controls were tried, during the Gulf War, all that happened, in Delhi, for example, was that first the school buses went off the roads, then the milk supply from Rajasthan dried up, and eventually the black market diverted the available fuel to the most profitable sectors of the economy. To illustrate the point more forcefully, if the Indian Armed Forces have their fuel supply cut by 10 per cent, not just during war but for training in peace, they would not lose just 10 per cent of their fighting effectiveness. When opposing an adversary who has adequate fuel continuously in both war and peace, the Indian Forces would be facing total defeat, i.e. a 100 per cent loss in effectiveness. The Indian economy or any other for that matter, behaves in much the same way. It is an all or nothing situation.

Meanwhile, we need to consider interim measures to import energy, which can at present be only by the medium of oil and gas. In nature, crude oil and natural gas occur in close association. All crude oils have a significant proportion of gas in solution which is evolved when the oil is produced, much like CO_2 from soda water. If a market is available for this gas, it is utilised; otherwise, it is burnt off in the atmosphere. In fact, much of Middle East gas is, thus, flared. Additionally, there are in nature large deposits of "free gas" i.e. gas not associated with oil. Such gas is not produced unless there is a market. It is well known that the largest deposits of oil and gas are in the Middle East. Also, the Central Asian parts of the former Soviet Union have substantial oil deposits as well as some of the largest known deposits of free gas. This is illustrated in Fig. 3.

International Gas Pipelines

Oil, being a liquid, can be transported by tankers to markets worldwide and as the demand rises, so does the price. Gas, on the other hand, is not easy to transport by sea and, by and large, is transported by land pipelines. Hence, the gas deposits of the Middle East and Central Asia have limited markets to which they can be economically transported. India is one of them. It is in this context that one has to visualise import of gas to India from the nearby gas-rich countries and it should be possible to work out reasonably stable long-term buyer and seller relationships. International gas pipelines are not new. North America has had them for nearly a century while Russian gas has been flowing to Western Europe for decades. Even now, plans are

Fig. 3

Oil & Gas Regions of Middle Est and Central Asia

afoot to move, albeit at great cost, Central Asian gas across an entire continent through China to Japan and later in the other direction, to Europe. If these pipelines are laid, then India can forget about getting substantial quantities of gas from this region.

Geography dictates that the pipelines for transporting this gas to India must traverse Pakistan and only limited quantities can come through an ocean pipeline. Ocean tanker transport of Liquefied Natural Gas (LNG) is also practicable but is a costly alternative to land pipeline transport. However, these alternatives would need to be developed as a precautionary measure.

According to current thinking, a major factor in India's defence preparedness is our ability to protect our lines of oil supply from the Middle

East from Pakistani interdiction. No thought seems to have been given to protecting the actual sources of supply. The defence policy of the Western powers, on the other hand, very definitely provides for intervention if for any reason their oil supply is cut off at the source. The last Gulf War was fought for this very reason. Once we become dependent on gas supply through international pipelines, we would need not only to protect those pipelines but also, more importantly, be able to intervene effectively if the gas itself is denied to us at source. It is very difficult today to conceive of the Indian Armed Forces manoeuvring in Central Asia, but it must be remembered that in the past any number of Central Asian adventurers had no problems in invading the Indian subcontinent. Surely the reverse is within the realms of possibility.

There is a severe mental block in India against being dependent in any manner on Pakistan and there is also a similar feeling in Pakistan about India. However, both countries need to rethink their mutually antagonistic attitudes in view of certain realities. If anything, Pakistan's energy resources are even poorer than India's and their social and political problems are perhaps more acute. However, one can see a visionary approach to the problems, at least by some Pakistanis who may be able to influence events.

In some recent publications by Pakistani experts, it is very clearly envisaged that Pakistan needs to import Middle East and Central Asian gas if it is to make any worthwhile progress. The economics of transporting the gas are such that it becomes viable only if the proposed gas pipelines to Pakistan are extended to the vast Indian markets. These publications state in no uncertain terms that it is in the mutual interest of South Asian countries to have a common approach to the import of natural gas. It is, therefore, obvious that good relations with Pakistan are crucial to our well-being. After all, their need is equal to ours and to quote an old proverb "a friend in need is a friend indeed". It is imperative that we adopt a unified defence posture wherein our Armed Forces are not facing each other but a common foe who may deprive both of us of our very sustenance.

It is necessary to address a basic question. What if Pakistan turns off the gas? One can counter with, what happens if an ocean line is disrupted? We would not even know whether it is due to sabotage or technical failure, and whom to blame. In the case of a land line, we can act militarily. However, the best solution is to pay an attractive transit fee in hard currency, which Pakistan cannot afford to lose. Additionally, the supplying countries would not like to lose the large Indian market and would probably cut off the gas to Pakistan. Ultimately, we have no choice. Either we trust Pakistan, or wallow in poverty with the added danger of national disintegration.

It would indeed be tragic if this disintegration came about because India denied itself the option of importing energy cheaply. None of the individual constituents of a fragmented India would have a vested interest in Kashmir and the very reason for our dispute with Pakistan would cease to exist. It is also not in India's interest to see a further break-up of Pakistan. If, for example, Sindh became independent and allowed a pipeline to India, the Punjabis would be the first to blow it up. Sindh would just not be strong enough to protect a pipeline. We should not allow a future historian to be able to say with the benefit of hindsight that the South Asian countries squandered their opportunities for progress and descended into chaos in the 21st century because of what could then appear to be petty squabbles between and within countries. This hindsight is available to us today.

The large investments required to put the gas transportation system in place are at present only available from the developed countries. Hence, there would be a common global strategic interest in protecting these investments. It also goes without saying that these investments will be forthcoming only if the economies of all the countries involved are totally open. The needs of Bangladesh will also have to be catered for. As it is, millions of their people are already in India illegally and if they do not get adequate supplies of energy, millions more will come over. Guns and bullets will not deter them.

International Politics and Availability of Oil

An important issue needs to be factored into our domestic and international policies. So far, except in the 1970s, oil has not been used by the exporting countries as a policy weapon, but there is no guarantee that this attitude will continue. With the growth of fundamentalism in various countries, there could be a reaction against our policies, which could result in an embargo on oil exports to India. Communal incidents in India would only stoke the fires of international fundamentalism. The situation with regards to the developed nations of the West is somewhat different. The Arabs learnt early in the game that without Western markets their oil is valueless and is just dirty black stuff under the desert sands. They will starve if they do not export their oil at whatever price the market will fetch. India, unfortunately, is not in the same league as the developed countries, but

should attempt to be so by opening up our oil and gas imports so that our market cannot be ignored. The more energy we import, the greater will be our ability to pay for it, the stronger will be our international market clout and not to be forgotten, a more powerful military establishment can be sustained.

A major failing on the part of both the authorities in India and the media is the habit of reporting prices as US dollars per barrel for crude oil and rupees per litre for petrol, diesel, etc, which makes it difficult for the public to relate the two prices. To remedy this, the following information is useful. One barrel is 159 litres and at current prices, the approximate cost break-up, including profits of Indian oil companies, of petrol is in rupees per litre: crude oil = 7.6, refining = 3.0 and distribution and marketing = 2.4, making a total of Rs 13.0/litre. The balance of the approximate price of petrol at the pump of Rs 30.0/litre is made up of taxes, duties, etc. Surely, the price of petroleum products could be much lower and does not need to be increased whenever the exchange rate of the rupee or the cost of crude oil changes adversely. In most developed countries, these taxes and duties are not looked upon as a source of revenue for the exchequer but as a fund to be solely utilised for investment in the transport infrastructure, i. e. roads, bridges, etc.

It has been conservatively estimated that the USA spends an additional $25 per barrel (figures as high as $50 have been quoted) on its military establishment to safeguard its imported oil, i.e. it costs the USA a total of $50 per barrel to import oil. As usual with their far-sighted economic policies, they do not try to recover such costs at the petrol pump, as is done in India. They allow their consumers to get cheap oil, and then tax at a reasonable rate the huge profits that accrue. This is a far more painless way of raising revenue.

Location of Oil and Gas Deposits: Geo and Oil Politics

The map in Fig. 3 depicts the geographic relationship of India with the oil and gas deposits of the Middle East and Central Asia. It will be seen that there is a core gas bearing area of gas fields centred around Turkmenistan and a somewhat incomplete circle of oil fields around this core comprising the Middle East and West Caspian region. Around this circle we now see a ring of steel slowly being built up by the military might of the Western powers. Israel, of course, is the hard diamond of this ring, with the rest of the ring comprising the US and Allied forces in the Persian Gulf area and now most significant of all, the presence of US and Allied troops in Afghanistan and various Central Asian countries. In the north-west quadrant of this ring lies Turkey, a NATO (North Atlantic Treaty Organisation) member with a number of Western bases and the Western Allies have backed this up by placing their so-called peace-keeping troops in the Balkans, specifically in Kosovo. It remains to be seen whether the Western accommodation with Pakistan will have the effect of excluding India from this ring.

Western World Interests in Protection of Oil Resources

The USA has been planning its Middle East strategy for decades and to start with, it leased the island of Diego Garcia from Britain as a springboard for future military action in the Persian Gulf and neighbouring areas. The Middle East, or West Asia, has always had an important role from time immemorial. For the first two thousand years of recorded history, it was the cradle of civilisation and indeed represented the centre of the known world. With the growth of civilisation in Asia and later in Europe, the Middle East came to represent the cross-roads of history and, therefore, the reason for its geo-strategic significance. Thus, began a series of wars resulting in, firstly, the spread of Islam, then the Crusades, the Mongol invasions, Turkish rule and, lastly, European and American domination, ostensibly ending with World War II, but which in reality continues into the 21st century.

The most outstanding feature of Western policy in the Middle Eastern region is the creation of, and continued support to, the State of Israel. With the discovery of oil in this area around the beginning of the 20th century, it became necessary for the Western powers who were the main consumers of this oil, to protect their interests. Meanwhile, anti-Jewish pogroms in Europe, culminating in the Holocaust, created a body of people who were looking for a safe place to live and the idea grew of settling in the Biblical lands, known throughout most of recorded history as Palestine. Thus, arose a congruence of the economic and political interests of the European powers, a very powerful combination. The British post-World War I mandate over this region was used to settle large numbers of Jewish immigrants and eventually to create the nation of Israel. Once again, the vision of Winston Churchill comes to the fore, because as Minister for Colonies at that time, he was instrumental in formulating the British Middle Eastern policy.

The Western powers have, thus, been, able to establish the most powerful military outpost ever, Israel, pointed right at the heart of the world's richest oil bearing territory. It is ironical that the oil wealth of the Arab countries is indirectly contributing to the support of their bitterest enemy. The Western powers do not try to tell their oil companies how to do their work, but rather make it possible for them to go about their business without let up or hindrance. It is possibly not a coincidence that the now incumbent leadership of the USA has a strong petroleum industry background. In other words, the Western oil companies look to their Defence Ministries for support and not to their Petroleum Ministries, if at all they have them. India needs to develop a similar culture.

Continuing in the same vein, when the regime of the Shah of Iran collapsed, the Western powers instigated a war between Iraq and Iran, and they also later caused a misreading of the situation by Iraq, which led to its invasion of Kuwait. Opportunities like this are not be missed, resulting in the Gulf War and the destruction of the Iraqi Army. This enabled the West to establish yet another military power centre, this time in the Persian Gulf region, supported by Arab monarchies. Having initially encouraged and used the Taliban to evict the Soviets, to take events to their logical conclusion, the disaster of 11 September 2001, in the USA, has been conveniently used to get rid of the Taliban and position Western troops in the Central Asian region, thus, almost completing the encirclement of a major part of the world's oil and gas resources. Osama bin Laden is only a bit player in this new Great Game. No doubt, attempts will be made to complete the ring in due course by using some excuse to position troops in the northern part of the Caspian Sea region.

Nothing could be further from the truth than the impression that all this is part of a deep-laid conspiracy. That theory went out in the first half of the 20th century. What we are seeing is a convergence and a recognition of the interests of different socio-political entities like the military, industry, media or different ethnic groups within the Western countries, as a result of which mutually beneficial policies evolve. This approach is sadly lacking in India.

The Western powers have realised that it is for the common good if whoever wants energy, including themselves, gets it by paying a market price. The great advantage they have is that they are paying for the oil imports in their own currencies whereas India has to pay in foreign hard currency. As a result, more than US$ 600 billion of Saudi money has remained behind in the USA for the Americans' benefit. Currently, the

USA imports about 100 million tonnes of oil per year from Saudi Arabia at an annual cost of about $1.5 billion. It would, therefore, appear that the USA has been practically getting Middle East oil almost for free for the last 50 years or so because, having sold their oil to the USA, the Arabs are taking only a small part of their money out. If at any time the Arabs decide to take their money out of the USA, the Americans will let the dollar collapse and the Arab holdings will become worthless. Alternatively, the USA could freeze the Arab assets as they have done with the Iraqi holdings in the USA. If India encourages the import of crude oil and gas by reducing market prices, it will reap the same benefits. At present, the hard currency that India pays for oil is banked in the USA, in effect for the Americans' benefit.

Depriving or the threat of depriving energy to any party as was done to Germany and Japan in the first half of the 20th century, only leads to war. In fact, just prior to World War II, Japan was importing as much as 80 per cent of its oil requirement from the USA and when an embargo on oil exports to Japan was implemented, Pearl Harbour ensued. What the developed countries now want is to ensure that no one, including the owners of the oil and gas, is able to impose an embargo.

A leading British historian, more than a hundred years ago, had said that most of the world's events have been shaped by Mongolian (which in its broadest sense includes Turkish) Westward expansionism, starting with Attila, followed by Genghiz Khan, Tamerlane and others. It caused Columbus to cross the Atlantic, Vasco da Gama to go around the Cape of Good Hope, and some things that were not initially anticipated viz. the problems of Bosnia, Kosovo and Chechnya. In our own country, it led to the invasions by the Afghans and Moghuls, the legacy of which we are still living with, whether it be Babri Masjid or Kargil. It would seem that history is repeating itself as it is always wont to do and it has rightly been said that those who do not read their history are condemned to relive it.

People's Republic of China's (PRC) Oil Interests

It is, therefore, appropriate at this stage to dwell on the Chinese role in the new energy Great Game. They are a very practical people and have a very good grasp of ground realities. Their economy has been growing in leaps and bounds, in gross as well as per capita terms, and, thus, has their need for energy. It is expected that in the next two decades or so, China will surpass the USA as the world's largest economic power and will need

appropriate quantities of energy to maintain this status. Though China's success so far has been fuelled by its larger indigenous energy base compared to India's, its needs are now outstripping its production. Hence, China is now eyeing the Central Asian resources and would certainly see India as a rival with similar objectives.

The Chinese have their eyes firmly set on Central Asian gas and have already started planning a major trunk gas pipeline from Central Asia to the industrial heartland of China and will do their utmost not to share the gas resources with India, as they would like to have it all. The Chinese have shown themselves to be masters of diplomatic manoeuvring and by egging on Pakistan, they are trying to see to it that India will not be able to access Central Asian gas.

To thwart any moves by India, they have covertly used Pakistan as a barrier between India and Central Asia and incidents like Kargil obviously link with larger Chinese game plans. Kargil is almost halfway between the Indian heartland and Central Asia and while it may be reading too much into the situation, Indian strategic weakness has been exposed in Kargil. Without committing their own troops, it would seem that the Chinese have been able to block any possible intention of projection of Indian power towards Central Asia. On an international scale, Kargil was a mere border skirmish but it was enough to throw India into turmoil. All our Bofors' ammunition was used up and our military effectiveness was brought into serious question. We need to examine whether Kargil represents the limit of our ability to conduct military operations, and if so, how are we going to deal with Central Asian gas. It would seem that a deal with Pakistan is unavoidable, even if it means accepting some unpalatable and, at present, even unthinkable terms.

The arrival of Western troops in Afghanistan astride China's route to the Central Asian oil and gas fields would have come as a blow to them and it is obviously the cause of sudden Chinese overtures of friendliness to India. While welcoming this, we should not lose sight of our own long-term interests, and should take this friendship with more than a pinch of salt. This logic would apply in our relationship with any country, as today's friend can easily turn into tomorrow's foe. The West would certainly like to support India at the expense of China and to this extent would encourage piping of Central Asian gas to India rather than China, but perceptions can change very quickly. It does not take much imagination to declare Gujarat and by proxy, India, a terrorist state. We should evolve a flexible policy accordingly. There will be many more Kargils and we should not be taken unawares by the next one. The question is, where will it be? History suggests that it will be in the north-east of India.

PRC's Interests in Hydropower Energy

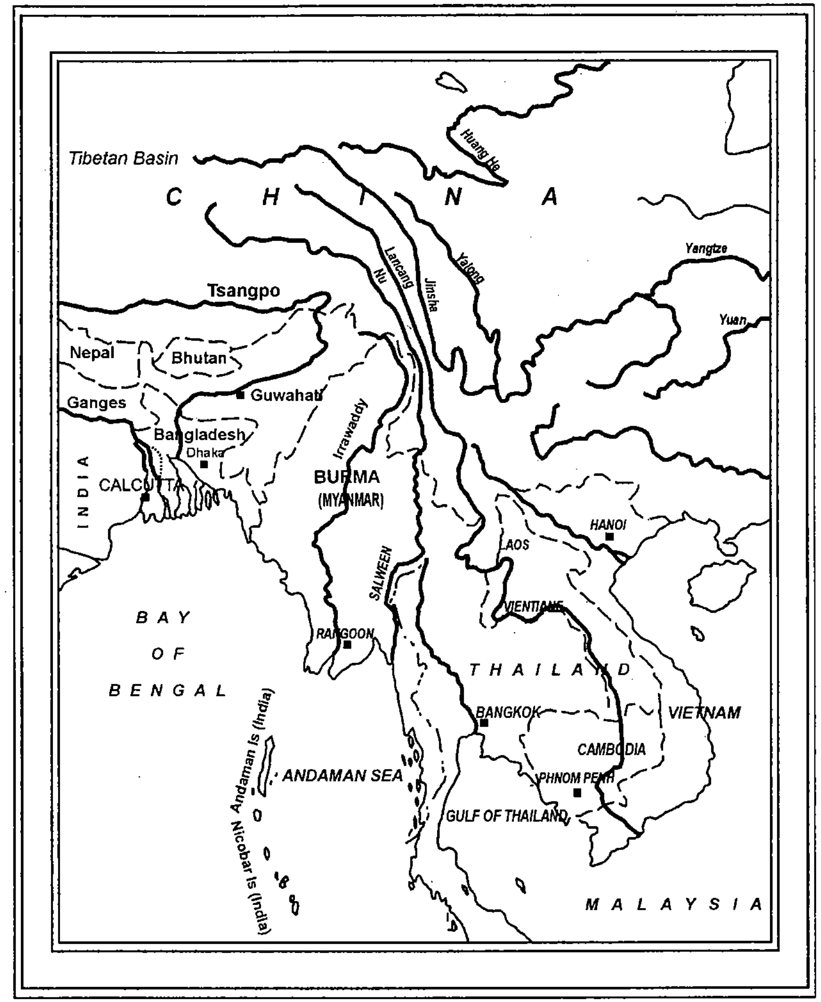
China's ambitions transcend Central Asian gas as this alone will not serve its future needs and it is looking at other energy resources. Fig. 4 is a map of the East Asian river system. It will be noted that almost all the major rivers of Asia arise in the Himalayas, at or near our north-eastern border, and in falling from these heights to the plains, they release far more energy than possibly the neighbouring countries will ever need. A point to be noted is that unlike other futuristic sources, no great technological advance is required to trap this energy. However, the steepest drop is on the Indian side, a point not lost on the Chinese and which we ignore at our own peril. They have, therefore, sent their troops ahead of their engineers. The area is a demographic vacuum and is ripe for occupation. We must beat our rivals to it, not just militarily but politically and economically.

The Chinese have already begun damming the mighty Yangtse river at the Three Gorges, the world's largest hydropower project, and are not going to stop there. They are already looking westwards to dam the Mekong, despite protests from Vietnam and other South-East Asian countries. It will not be long before they start planning to tame the Brahmaputra and other rivers on the Indian side of the watershed and this is where we are likely to see the next Kargil

Shale Oil. Furthermore, the southern slopes of Arunachal Pradesh and the adjoining parts of Myanmar have extensive deposits of an energy source called "oil-shale". Much larger deposits of oil shale are available in North America and the US has done whatever technical work is required to tap these resources eventually. They are just waiting for the international political and economic conditions to change. There are no secrets about the relevant technology and it is even being used at a cottage industry level by local tribes in north-east India. China already has a significant shale oil industry and would certainly be aware of the Indian deposits. Meanwhile, the gentle Indian giant continues to sleep on these deposits but we may rest assured that when the time comes, the Chinese juggernaut will just roll in almost in a walk-over if prophylactic steps are not taken now.

Fig. 4

River System of East Asia



As at Kargil, rather than commit their own troops, the Chinese will instigate further infiltration from Bangladesh and use them to cut off the north-east, not so much by military means but rather by the sheer weight of numbers. At that stage, no doubt, we will bemoan yet another gross intelligence failure. Bangladesh, despite having made some recent impressive gas discoveries, is, and is likely to remain, a highly energy deficient country. Its population is going up at a tremendous rate and the country will not be able to accommodate the growing numbers. As it is, India has not been able to curb the illegal infiltration from Bangladesh and the situation is going from bad to worse. It has already gone from a trickle to a flood and with a little encouragement from powerful outside elements, it will become a raging torrent. The Indian Army will not be able to stem this demographic invasion. Already, some Bangladeshi intellectuals are questioning the basis of the 1947 Partition of India and are expressing a view that the Brahmaputra valley of Assam is rightfully theirs. They are spouting a philosophy of *lebensraum* or living space as the Germans did in the last century. The Bangladeshis are basically a plains people and will be quite happy to leave the mountains of north-east India with their energy resources to the Chinese.

The Indian Press has been carrying detailed reports on the Chinese moves towards our borders in Arunachal. They are apparently creating a road and rail infrastructure for which there is no need, from their defence point of view, and it can only be assumed that they have very wide-ranging designs, inimical to Indian interests. Compared to other parts of India, Arunachal Pradesh is very thinly populated and China has continued to dispute Indian claims to this area. New Chinese towns are being set up just across the border and will eventually spill over into India. China has also been making moves in the Bay of Bengal and this can only be interpreted as an encircling move to cover its eventual takeover of Arunachal Pradesh.

To quote from the Indian Press, "Nothing can damage national interests more than a foreign policy driven not by-level headed assessments and calculations, but by hope. A down-to-earth, result-oriented approach towards China is necessary because Beijing is a skilled practitioner of classical balance-of-power politics". India should "hope for the best, but prepare for the worst". In this connection, our foreign and military policies should be guided by the age-old dictum that there are no permanent friends or foes, be it Pakistan, China or any other country, but only permanent interests. In the next few decades, our permanent interest should revolve primarily around ensuring availability of adequate quantities of energy from whatever source. Here again, any energy sources should not be dependant on the wishful thinking of scientific or technological breakthroughs, which may or may not come about, but rather on what can be practically attained on the basis of today's knowhow.

It is apparent to any knowledgeable observer that whichever country controls the energy resources of the Caspian region and the Middle East will control the 21st century and it is worth examining whether war is the only means of exercising such control. In the historic past, wars were fought primarily to control land. but with scientific and social progress, today it is no longer necessary to own and control land physically much beyond what is actually required to live on. All that is sought to be achieved is the control of access to the resources of other people's land by establishing spheres of influence. Hence, the Chinese do not actually want to rule India. All they will try to do is to preempt India from gaining access to the surplus resources of neighbouring countries, which they themselves covet.

PRC and India and Their Energy Requirements

Modern weaponry has such destructive power that any future war would only lead to mutual extinction of the combatants and it is to avoid this danger that the world has moved towards a set of treaties that restrict the further development or use of such weaponry. This approach is fine for the developed countries as they have reached a saturation point in energy consumption levels and would prefer a status quo in world affairs, but it leaves China and India in the lurch. Both these countries are going to need increasing quantities of oil and gas from the Greater Middle East in this century and the fear is that there may not be enough to go around. China is evolving a policy to deal with this problem by political manoeuvring and flexing its military muscle and India would not want to get left behind. This is where the flash-point of a nuclear holocaust lies and all the treaties signed so far will not have any greater value than that of Versailles.

Global Views for Sharing Energy Resources

The world needs to think of an alternative and the answer seems to lie in an assurance that all countries, particularly the have-nots, will get a fair ration of the available energy supply. It should be possible to work out a formula that meets the needs of the energy exporting and importing countries. It would be market-oriented but would allow for an eventual move to common per capita energy consumption for the entire world. This would mean a reduction in the energy availability of the developed nations but they have been profligate with their use of energy and they could easily learn to live with the situation and maintain their standard of living by improving their energy efficiency. This treaty would need to be in effect for only a few decades till the oil and gas resources of the Greater Middle East run out and, with some good fortune, technology evolves alternative sources of energy which probably will not be geography specific.

The concept could easily be extended to other strategic resources. We could even think of a joint hydropower development programme in the area in and around north-east India with a view to sharing its energy resources. Here again, huge international investments would be required and many countries would have a stake in this proposal.

There is a reasonable possibility of achieving these objectives because the world is slowly if not steadily moving towards an accommodation of global interests. The USA and former Soviet Union, now Russia, have signed treaties which will eventually lead to substantial disarmament, particularly with regard to weapons of mass destruction and India has offered to follow suit provided some safeguards are introduced. Though there have been some contrary signals emanating from the USA, it is hoped that eventually wiser counsel will prevail. The world has also seen the proliferation of a variety of legal, commercial and environmental treaties and creation of common economic zones, currencies, etc. The acme of this move is the World Trade Organisation (WTO). All these treaties and agreements have necessitated some surrender of sovereign rights, but the various countries involved have seen the overall benefits to themselves and have accepted the conditions. Here again, one can hear murmurs of disaffection from the USA, but, hopefully, only temporarily. Lastly, no treaty should ever be negotiated from a position of political or military weakness.

There is no guarantee that a workable solution to India's energy shortages will be found, and we may not be able to avoid the ensuing crash. However, the least we can do is to cushion the fall and preserve the integrity of the country. This is the crux of the problem. Events in the 21st century will move faster than ever before. The time to act is now.

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